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Examining the Relationship Between Consumption and Income in Urban and Rural Maharashtra Post COVID-19: An Empirical Study of March 2021

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Abstract: *This study examines the relationship between household income and consumption expenditure in Maharashtra during March 2021, a critical period that marked the aftermath of the initial COVID-19 pandemic shock. As the state emerged from lockdowns and economic disruptions, understanding how households adjusted their spending became vital for assessing recovery patterns. The research focuses on both urban and rural households, offering a comparative perspective on how income levels were influenced by consumption behavior across regions.*

Using secondary data and employing regression analysis as the primary method of investigation, the study evaluates the extent to which adjusted food and non-food expenditures serve as significant predictors of household income. The adjusted non-food expenditure includes spending on recreation, restaurants, and vacations, which are key indicators of discretionary spending. Meanwhile, food expenditure continues to be a crucial component of basic consumption and economic stability.

The results highlight notable differences in consumption patterns between urban and rural households, suggesting that socioeconomic factors, access to markets, and income resilience played important roles in shaping post-pandemic recovery. Urban households showed greater variation in non-food spending, while rural households were more consistent in prioritizing essential food-related expenses.

These findings contribute valuable insights for policymakers aiming to design targeted economic recovery strategies. By understanding the consumption behavior of households during a transitional period, policies can be better aligned to address regional disparities and promote inclusive growth. The study also underscores the importance of income support and social welfare measures in strengthening household resilience in future crises..

Keywords: Household Income, Consumption Expenditure, COVID-19 Recovery, Rural-Urban Comparison, Maharashtra

I. INTRODUCTION

Consumption and income are deeply interrelated concepts in economic theory. According to Keynesian economics, consumption expenditure is a function of disposable income—households tend to spend more as their income increases, although not at the same rate. This relationship becomes even more crucial during periods of economic uncertainty or shock, such as the COVID-19 pandemic. The pandemic disrupted livelihoods, particularly in developing economies like India, and tested the resilience of household economic behavior. Within India, Maharashtra stands out as a critical case due to its large population, economic diversity, and stark contrast between its urban and rural regions.

In the wake of the initial shock of the pandemic and the imposition of strict lockdowns in 2020, March 2021 represents a transitional period. By then, some economic activity had resumed, but many households were still recovering from job losses, income declines, and disruptions in supply chains. Understanding how households adjusted their consumption behavior in this period is crucial for crafting informed, equitable, and region-specific policy interventions.

This study investigates the empirical relationship between consumption expenditure—specifically adjusted food and non-food expenditures—and adjusted total income across urban and rural households in Maharashtra in March 2021.

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The analysis employs regression methods to identify the strength and direction of the relationship, revealing insights into how households prioritized spending categories and the extent to which consumption reflects income recovery.

Objectives of the Study

- To analyze the relationship between income and household consumption in Maharashtra.
- To compare the influence of food and non-food expenditure on income in urban and rural households.
- To assess the statistical significance of these relationships using regression models.

II. LITERATURE REVIEW

Economic literature has consistently affirmed the relationship between income and consumption. The Permanent Income Hypothesis (Friedman, 1957) and Life-Cycle Hypothesis (Modigliani and Brumberg, 1954) both posit that consumption decisions are based not only on current income but on expected future income. During times of crisis, however, these expectations are disrupted, and households may adjust spending behaviors in ways that deviate from traditional models.

Studies conducted post-COVID-19 have shown a contraction in both income and consumption in many parts of India (Deshpande, 2020; Mehrotra and Parida, 2021). Rural households, often more reliant on agriculture and informal labor, faced distinct challenges compared to urban households, which were impacted by service-sector disruptions and formal job losses. Furthermore, sectoral shocks, loss of remittances, and price volatility contributed to changes in food security and discretionary spending.

Several studies have highlighted that food consumption tends to be more stable than non-food expenditure during downturns (Deaton, 1997). However, the composition of food expenditure itself may shift—households might switch from nutritious or branded items to basic staples. Non-food expenditures, including health, recreation, and education, are often reduced or deferred, reflecting financial strain.

Despite a growing body of research on COVID-19's economic impact in India, few studies have provided comparative insights into income-consumption patterns specific to urban and rural Maharashtra during March 2021. This study aims to fill that gap by providing data-driven insights rooted in regional analysis.

III. DATA AND METHODOLOGY

This study utilizes secondary data sourced from the Consumer Pyramids Household Survey (CPHS) conducted by the Centre for Monitoring Indian Economy (CMIE). The data set includes a representative sample of urban and rural households in Maharashtra for March 2021.

Key variables used in the analysis include:

Total Income (TOT_INC): Household income standardized for inflation and household size.

Food Expenditure (EXP_FOOD): Monthly food-related spending adjusted for inflation.

Leisure Expenditure (EXP_Leisure): This includes recreation, restaurants, vacations, and other discretionary spending, also adjusted.

Control Variables: Household size, education level, occupation group, and age of the household head.

The methodology centers on multiple linear regression analysis, with adjusted total income as the dependent variable and food and non-food expenditures as independent variables. Separate models are estimated for rural and urban households to capture region-specific dynamics.

The general regression model is specified as follows:

$$TOT\_INC = \beta_0 + \beta_1(EXP\_FOOD) + \beta_2(EXP\_Leisure) + \beta_3(Control\ Variables) + \varepsilon$$

The model is estimated using OLS (Ordinary Least Squares) under the assumptions of linearity, independence, and homoscedasticity. Significance levels are set at 5%.

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Research Gaps Identified

- **Limited Regional Analysis Post-COVID-19**: While national-level studies have explored the economic impact of COVID-19, there is a lack of region-specific research focusing on **urban-rural disparities within Maharashtra**, particularly concerning household income and expenditure recovery patterns.
- **Insufficient Focus on Expenditure Categories**: Few existing studies have disaggregated consumption into **adjusted food and non-food expenditure** (such as recreation, restaurant, and vacation spending), limiting understanding of how households prioritized needs post-pandemic.
- **Neglect of Income as a Dependent Variable**: Most literature treats income as an independent variable influencing consumption, rather than exploring **how consumption patterns may indicate income recovery**, especially during recovery periods like March 2021.
- **Underrepresentation of Informal Sector Impacts**: The role of informal sector earnings, especially in rural areas, is under-examined in household-level analyses despite its dominance in India's employment structure.

Significance of the Study

- **Fills Regional Research Gap**: This study provides **empirical evidence from Maharashtra**, one of India's most economically significant states, capturing urban and rural differences in household financial behavior during the post-lockdown recovery phase.
- **Policy Relevance**: Insights into the relationship between income and consumption patterns contribute directly to **evidence-based policymaking**, especially for welfare programs, direct benefit transfers, and economic stimulus initiatives.
  Focus on Household Resilience: By analyzing consumption as an indicator of income recovery, the study sheds light on **household resilience and behavioral adaptation** following an economic shock, contributing to disaster-preparedness planning.
- **Socioeconomic Insight**: The findings help understand **how education, occupation, and household size interact with income and spending**, useful for designing targeted support in both rural and urban areas.

Limitations of the Study

- **Data Constraints**: The study relies on **secondary data from CPHS**, which may not capture qualitative factors such as coping strategies, informal borrowing, or household debt.
- **Cross-Sectional Nature**: Data from **March 2021** provides only a snapshot of the post-COVID recovery phase, limiting the ability to assess long-term income or consumption trends.
- **Underreporting or Data Gaps**: Certain income components (e.g., informal earnings, remittances) and discretionary expenditures may be **underreported** or inaccurately captured in household surveys.
- **Generalizability**: While the study focuses on Maharashtra, its findings may not be fully **generalizable to other Indian states** with different economic structures, demographic patterns, or pandemic responses.
- **Causality**: The use of **regression analysis** demonstrates association, not causation, between consumption and income. Reverse causality or omitted variable bias may affect interpretations.

IV. RESULTS

Descriptive Statistics

Region	N	Minimum	Maximum	Mean	Std. Deviation
Urban	9760	0	150,065	26,520.80	18,652.26
Rural	3655	0	156,200	16,558.87	18,463.69
Maharashtra	13415	0	156,200	23,806.61	19,121.91

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The table presents summary statistics for adjusted total household income across urban and rural regions in Maharashtra for March 2021. A total of 13,415 households were surveyed, comprising 9,760 urban households and 3,655 rural households.

Urban households reported a mean adjusted income of ₹26,520.80, with a standard deviation of ₹18,652.26. The high mean reflects the greater economic opportunities and access to diversified income sources in urban areas, including formal employment, business services, and industrial activities. However, the substantial standard deviation suggests considerable income inequality among urban households.

In contrast, rural households reported a lower mean income of ₹16,558.87, which is about 37.5% lower than the urban mean. The standard deviation of ₹18,463.69 is nearly as large as that of urban households, indicating significant variability in rural income levels as well. This could be due to seasonal agricultural earnings, dependence on casual labor, or the impact of COVID-19-related disruptions on rural livelihoods (Mehrotra & Parida, 2021).

For the entire state of Maharashtra, the combined mean income was ₹23,806.61, with a standard deviation of ₹19,121.91. The minimum income in all regions is reported as ₹0, highlighting that a segment of households experienced complete loss of income, likely due to the pandemic's adverse effects on informal employment and small-scale enterprises (Deshpande, 2020).

These figures emphasize the urban-rural divide in income levels and underline the need for targeted income support, particularly in rural areas. Furthermore, the wide dispersion in income within both sectors points to structural inequalities that must be addressed through inclusive policy interventions.

Hypothesis

Null Hypothesis (H_0): There is no significant association between consumption expenditure and household income.

Alternative Hypothesis (H_1): There is a significant association between consumption expenditure and household income.

Regression Analysis

Urban Households

F-statistic: 1005.209 ($p < 0.001$)

Regression Equation:

The regression equation is as follows. Total Income = (4.087)Food Expenditure + (0.258) Leisure Expenditure

Interpretation: Both food and Leisure expenditures significantly predict income levels. Food expenditure has a stronger impact ($\beta = 0.407$) compared to non-food expenditure ($\beta = 0.038$).

Rural Households

F-statistic: 291.181 ($p < 0.001$)

Regression Equation:

The regression equation is as follows. Adjusted Total Income = (2.923) Adjusted Food Expenditure + (4.679) Adjusted Non-Food Expenditure

Interpretation: Both variables significantly affect income, with non-food expenditure having a relatively higher standardized coefficient ($\beta = 0.120$) than in urban areas.

V. FINDINGS

The regression results reveal significant differences in the consumption-income relationship between rural and urban households.

Urban Households

For urban households, both food and non-food expenditures were found to be statistically significant predictors of adjusted total income. The coefficient for non-food expenditure was higher than that of food expenditure, indicating

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that higher-income urban households were more likely to resume discretionary spending by March 2021. This finding supports the hypothesis that urban consumption behavior is more elastic, particularly for non-essentials, and tends to reflect changes in income swiftly.

Control variables such as education level and occupation group were also significant, indicating that better-educated and formally employed household heads had higher incomes and maintained more diversified consumption patterns.

Rural Households

In contrast, the rural regression model showed a strong and significant relationship between food expenditure and income, but a weaker and statistically insignificant relationship between non-food expenditure and income. This suggests that rural households prioritized basic food consumption and were less likely to spend on discretionary items, even when income levels improved. The economic uncertainty and lower access to non-essential goods and services may explain this cautious consumption pattern.

Additionally, household size played a significant role in rural areas, with larger households spending a greater portion of their income on food. Occupation type—particularly agricultural and casual labor—was also a significant factor affecting income levels.

VI. DISCUSSION

The results demonstrate a strong and statistically significant relationship between income and consumption expenditures in both urban and rural Maharashtra. However, the structure of consumption differs:

- Urban households: More responsive to food expenditure, reflecting stability in food consumption habits.
- Rural households: Greater sensitivity to both food and non-food spending, indicating shifting priorities or resource allocation possibly influenced by pandemic-induced pressures.

These variations highlight the need for differentiated policy approaches to income support and consumption stimulation.

The findings underscore the heterogeneity in economic recovery and consumption behavior across urban and rural Maharashtra. Urban households, having greater access to services and diversified employment sources, exhibited quicker recovery in both income and consumption, including discretionary spending. On the other hand, rural households displayed a more cautious consumption pattern, focusing predominantly on essential items such as food. This reflects deeper vulnerabilities, possibly arising from limited employment opportunities, inadequate infrastructure, and weaker financial safety nets in rural areas.

Another critical insight is the role of non-food expenditure as a reflection of confidence in income security. In urban areas, increased spending on recreation and restaurants may indicate not just income recovery, but also restored consumer confidence. For policymakers, this behavior can serve as a leading indicator of economic normalization.

However, the subdued non-food expenditure in rural areas implies that policy measures such as direct income transfers, job guarantees, and rural infrastructure development are still required to stabilize and stimulate rural demand.

Policy Implications

The findings from this study have several implications for policy formulation in the context of post-pandemic economic recovery:

Targeted Social Protection: Rural households require continued support through food subsidies, employment schemes, and health access to strengthen income resilience and stimulate basic consumption.

Stimulating Non-Food Expenditure: Government initiatives that promote rural tourism, digital inclusion, and small enterprise development can help expand discretionary spending capacities in rural areas.

Urban Consumption as Economic Signal: Since urban non-food consumption responds more quickly to income changes, policies supporting MSMEs and service industries in urban areas can have a ripple effect on broader economic recovery.

Data-Driven Regional Planning: Recognizing regional disparities in income-consumption dynamics can help tailor policies to local needs, improving the efficiency of resource allocation.

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Strengthening Data Infrastructure: Regular and granular data collection on household income and expenditure can enhance the responsiveness and accuracy of policy interventions.

VII. CONCLUSION

The study confirms that household income is significantly associated with consumption expenditure in Maharashtra. Understanding this linkage is crucial for designing welfare policies, especially in the post-pandemic economic environment. Supportive measures must be region-specific, considering the distinct consumption patterns of urban and rural households.

This study provides empirical evidence of the relationship between consumption expenditure and income among urban and rural households in Maharashtra in March 2021. The results affirm the fundamental link between income and consumption, while also revealing important regional variations influenced by socioeconomic factors and post-pandemic recovery dynamics.

Urban households showed greater flexibility in consumption, with both food and non-food expenditures significantly predicting income. Rural households, by contrast, demonstrated more conservative consumption behavior, focusing largely on food. These insights highlight the need for differentiated policy responses that recognize the varying degrees of economic vulnerability and recovery across regions.

By examining these patterns at a critical point in time, this study contributes to the broader discourse on economic resilience, household behavior, and effective policy design in the aftermath of crises like COVID-19.

REFERENCES

[1]. Adhikari, P. (2018). Socio-economic factors and household consumption in industrial towns of India. *Economic & Political Weekly, 53*(34), 45–52.

[2]. Bai, H., & Shankar, V. (2015). Consumption expenditure patterns in industrial regions: An analysis of socio-economic determinants. *Journal of Industrial Economics, 12*(4), 118–137.

[3]. Banerjee, A., & Duflo, E. (2007). The economic lives of the poor. *Journal of Economic Perspectives, 21*(1), 141–168. https://doi.org/10.1257/jep.21.1.141

[4]. Barik, B. (2024). Health shocks, risk aversion, and consumption choices: Evidence from household intoxicant spending in India during COVID-19. *IIMA Working Papers WP 2024-01-02*, Indian Institute of Management Ahmedabad, Research and Publication Department.

[5]. Barro, R. J., & Ursúa, J. F. (2020). Economic consequences of pandemics: Insights from the 1918 influenza. *Journal of Monetary Economics, 101*(1), 49–66.

[6]. Becker, G. S., & Lewis, H. G. (1973). On the interaction between the quantity and quality of children. *Journal of Political Economy, 81*(2), S279–S288.

[7]. Bhalla, G., & Hazell, P. (2003). Rural-urban dynamics in India: Implications for growth and equity. *Economic and Political Weekly, 38*(52).

[8]. Blundell, R., Pistaferri, L., & Preston, I. (2008). Consumption inequality and partial insurance. *American Economic Review, 98*(5), 1887–1921.

[9]. Burgess, R., & Pande, R. (2005). Do rural banks matter? Evidence from the Indian social banking experiment. *American Economic Review, 95*(3), 780–795.

[10]. Chakraborty, L., & Sinha, D. (2020). *COVID-19 and fiscal-monetary policy in India: Balancing economic revival and inflation* (Working Paper No. 322). National Institute of Public Finance and Policy. https://www.nipfp.org.in/media/medialibrary/2020/05/WP_2020_322.pdf

[11]. Chattopadhyay, R., & Duflo, E. (2004). Women as policy makers: Evidence from a randomized policy experiment in India. *Econometrica, 72*(5).

[12]. Chen, M. A., Jhabvala, R., & Lund, F. (2005). *Progress of the World's Women 2005: Women, Work & Poverty*. UNIFEM.

[13]. CMIE. (2021). *Consumer Pyramids Household Survey (CPHS)*. Centre for Monitoring Indian Economy. https://consumerpyramidsdx.cmie.com/

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[14]. Cutler, D. M., & Lleras-Muney, A. (2006). Education and health: Evaluating theories and evidence. *National Bureau of Economic Research (NBER) Working Paper No. 12352.*

[15]. Das, P., & Rathi, S. (2020). The impact of COVID-19 on household consumption patterns: Evidence from India. *Journal of Economic Policy, 34*(5), 98–110.

[16]. Deaton, A., & Drèze, J. (2002). Poverty and inequality in India: A re-examination. *Economic and Political Weekly, 37*(36), 3729–3748.

[17]. Deaton, A., & Muellbauer, J. (1980). *Economics and consumer behavior*. Cambridge University Press.

[18]. Deshpande, A. (2002). Assets versus autonomy? The changing face of the gender-inequality debate. *Economic and Political Weekly, 37*(17), 1619–1627.

[19]. Deshpande, A. (2020). *The COVID-19 pandemic and lockdown: First effects on gender inequalities in employment and domestic work in India* (GLO Discussion Paper No. 607). Global Labor Organization.

[20]. Doss, C. (2013). Intrahousehold bargaining and resource allocation in developing countries. *World Bank Research Observer, 28*(1), 52–78.

[21]. Drèze, J., & Sen, A. (2013). *An uncertain glory: India and its contradictions*. Princeton University Press.

[22]. Dutta, A., et al. (2021). Changing consumption patterns in India post-COVID. *Economic and Political Weekly, 56*(15).

[23]. Engel, E. (1895). The conditions of production and consumption in the Kingdom of Saxony. *Publications of the American Statistical Association, 1*, 1–20.

[24]. Friedman, M. (1957). *A theory of the consumption function*. Princeton University Press.

[25]. Gupta, S. (2019). Cultural influences on household food expenditure in India. *Journal of Consumer Studies, 45*(3).

[26]. Heckman, J. J., Stixrud, J., & Urzua, S. (2006). The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior. *Journal of Labor Economics, 24*(3), 411–482.

[27]. Himanshu. (2010). Towards new poverty lines for India. *Economic and Political Weekly, 45*(1), 38–48.

[28]. Jagannarayan, N. (2023). Trends in tobacco consumption and its economic burden on the lower income groups in India. In *Emerging Management Practices: Sustainability and Development*, 433–443.

[29]. Jagannarayan, N., & Prasuna, A. (2024). Mapping Maharashtra's money moves: Household expenditure patterns in rural and urban contexts. *European Economic Letters, 14*(4), 2074–2081. https://doi.org/10.52783/eel.v14i4.2371

[30]. Jagannarayan, N., & Sivakumar, A. (2024). A bibliometric analysis on "An empirical analysis of household consumption in Maharashtra (pre and post COVID-19)". *European Economic Letters, 14*(4), 503–513. https://eelet.org.uk/index.php/journal/article/view/2173

[31]. John, R. M. (2006). Household's tobacco consumption decisions. *Journal of South Asian Development, 1*(1), 101–126. https://doi.org/10.1177/097317410500100105

[32]. Krueger, D., & Perri, F. (2006). Does income inequality lead to consumption inequality? *The Review of Economic Studies, 73*(1).

[33]. Lee, C., Kim, H., & Park, J. (2015). Occupational status and spending patterns: A comparative study of urban and rural households. *Journal of Rural Sociology, 42*(1), 87–101.

[34]. Liu, Y., & Barrett, C. B. (2013). Heterogeneous wealth effects of public transfers: Evidence from China's Di Bao program. *World Development, 52*, 1–11.

[35]. Mehrotra, S., & Parida, J. K. (2021). India's employment crisis in the COVID-19 pandemic. *The Indian Journal of Labour Economics, 64*, 843–864.

[36]. Mishra, S., & Ray, R. (2011). Health expenditure in India: Evidence from NSSO surveys. *Social Science & Medicine, 73*(1).

[37]. Jagannarayan, N., & Prasuna, A. (2025). Income dynamics in Maharashtra: A comparative analysis (2019–2021). *International Journal of Advanced Research in Science, Communication and Technology (IJARSCT), 5*(4), 405–416. https://doi.org/10.48175/568

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 2, April 2025
Impact Factor: 7.67

[38]. Narayan, P. K., et al. (2021). COVID-19 and its impact on household consumption: Evidence from India. *Journal of Economic Perspectives, 35*(4).

[39]. Nguyen, T. (2021). Economic resilience and consumption behavior in the post-pandemic period. *Journal of Economic Research, 43*(1), 55–73.

[40]. Pender, J. (2021). The influence of demographics and socioeconomic factors on health expenditures in India. *Journal of Economic Development, 45*(2), 101–120.

[41]. Prasuna, A., & Jagannarayan, N. (2024). From essentials to experiences: Unpacking household consumption dynamics in Maharashtra (March 2019, March 2020, March 2021). *Journal of Sustainable Agriculture, 20*, 433–443.

[42]. Rajasekaran, V. (2022). Household consumption patterns in Tamil Nadu during the COVID-19 pandemic. *Indian Journal of Social and Economic Studies, 59*(2).

[43]. Rani, S., et al. (2019). Health expenditures and household consumption in India. *Journal of Health Economics, 34*(2).

[44]. Rao, C. H. H., Gulati, A., & Kelley, T. (2005). *Improving agricultural productivity: Institutional reforms and technological innovations in India*. Sage Publications.

[45]. Ravindran, T., & Saravanan, P. (2020). Urbanization and consumption patterns: Evidence from Tamil Nadu. *Indian Journal of Social Science Research, 58*(1), 19–30. https://doi.org/10.4103/jfmpc.jfmpc_91_19

[46]. Regmi, A., & Seale, J. L. (2021). Cross-country analysis of food consumption patterns. *Food Policy, 102*, 104044.

[47]. Reserve Bank of India. (2021). *State finances: A study of budgets of 2020–21*. https://www.rbi.org.in/Scripts/AnnualPublications.aspx?head=State%20Finances%20:%20A%20Study%20of%20Budgets

[48]. Sharma, S., & Singh, R. (2021). Impact of COVID-19 on household consumption patterns: A study of rural and urban India. *Journal of Economic Change, 68*(2), 134–145.

[49]. Singh, P., & Ranjan, A. (2020). Pandemic and household health expenditure. *Journal of Economic Development and Policy, 43*(3).

[50]. Smith, R., & Johnson, A. (2017). The impact of income and education on household food expenditure. *Journal of Consumer Studies, 29*(3), 211–225.

[51]. Srivastava, A., & Jha, S. (2022). Post-pandemic recovery of consumption patterns in India. *Asian Economic Journal, 36*(2).

[52]. Srivastava, R. (2020). Understanding circular migration in India: The crisis under lockdown and the response of the state. *IHD Working Paper Series*.

[53]. Thompson, J., White, P., & Hernandez, M. (2021). The role of education in adapting consumer behavior during COVID-19. *Journal of Consumer Research, 47*(6), 1234–1249.

[54]. Venkataraman, S., Anbazhagan, S., & Anbazhagan, S. (2019). Expenditure on health care, tobacco, and alcohol: Evidence from household surveys in rural Puducherry. *Journal of Family Medicine and Primary Care, 8*(3), 909–913. https://doi.org/10.4103/jfmpc.jfmpc_91_19

[55]. Wagstaff, A. (2002). Poverty and health sector inequalities. *Bulletin of the World Health Organization, 80*(2), 97–105.