

URBANIZATION AND PRIVATE HOSPITALS: A STUDY ON THEIR
INTERDEPENDENCE AND SPATIAL IMPLICATIONS WITHIN AIZAWL
MUNICIPAL CORPORATION (AMC) AREA

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ABSTRACT

Urbanization in rapidly growing cities has reshaped not only demographic patterns but also the spatial organization of essential urban services, particularly health care infrastructure. In India, the expansion of private hospitals has emerged as a defining feature of urban growth, often responding to the limitations of public health systems while simultaneously transforming urban space. This study examines the interdependence between urbanization and the growth of private hospitals, with specific attention to their spatial implications within the Aizawl Municipal Corporation (AMC) area. Adopting an integrated quantitative–qualitative research design, the study combines demographic analysis, correlational assessment, institutional data, and qualitative insights from private hospital proprietors collected through interview schedules administered via KoboToolBox. Findings indicate that a substantial proportion of Aizawl’s population growth between 2011 and 2026 is attributable to migration-driven urbanization, and that urban population growth exhibits a strong positive association with the expansion of private hospitals. Beyond this demographic relationship, the study reveals significant spatial outcomes, including spatial concentration of hospitals in central urban areas, vertical intensification of land use, and the emergence of health care-led micro-economies comprising pharmacies, food establishments, and informal vendors. Drawing on Henri Lefebvre’s theory of the production of space, Robert K. Merton’s concept of latent functions, and Setha Low’s interpretation of space as socially and culturally produced, the study argues that private hospitals function not merely as health care providers but as influential urban institutions actively shaping spatial practices, land use, and everyday urban life. The paper concludes by emphasizing the need for integrated urban and health planning frameworks, particularly in spatially constrained hill cities such as Aizawl.

Keywords: Urbanization, Private Hospitals, Urban Health Systems, Migration and Urban Growth, Spatial Implications, Production of Urban Space, Healthcare-Led Urban Transformation

INTRODUCTION

Urbanization is one of the most significant social transformations of the contemporary world. In developing regions, the rapid growth of cities is not merely a demographic phenomenon but a complex socio-spatial process that reshapes economic activities, institutional arrangements, and everyday life. Indian cities, in particular, have experienced accelerated urban growth marked by migration, spatial expansion, and the proliferation of private services. Among these services, private health care institutions, especially private hospitals, have assumed a critical role in meeting the health needs of expanding urban populations.

Aizawl, the capital city of Mizoram, represents a distinctive case of urbanization. As a hill city with severe spatial constraints, limited flat land, and rapid population growth, Aizawl presents unique challenges for urban planning and service provision. Over the past two decades, the city has witnessed a notable increase in private hospitals, coinciding with population growth, urban expansion, and rising demand for specialized health care services. This simultaneous growth raises important sociological questions regarding the relationship between urbanization and private health care infrastructure, as well as the spatial consequences of this relationship.

This paper seeks to examine the interdependence between urbanization and private hospitals in Aizawl and to analyze the spatial implications arising from this interdependence. Rather than treating private hospitals as passive responses to urban growth, the study conceptualizes them as active agents that shape urban space, influence land use, and generate secondary economic activities. By situating the analysis within sociological theories of urbanization and space, the study moves beyond descriptive accounts and offers an interpretive understanding of how health care institutions participate in the production of urban space.

The central research objectives guiding this study are:

1. To study the interdependence between urbanization and private hospitals in AMC area
2. To examine the spatial implications associated with the growth of private hospitals in AMC area

REVIEW OF LITERATURE

Urbanization as a Sociological Process

Urbanization is a complex and multidimensional phenomenon that extends beyond the mere increase in the number of people living in urban areas. As a key focus of sociological inquiry, urbanization involves demographic shifts, economic restructuring, transformations in social organization, and the reconfiguration of space and institutions. Early sociological scholars emphasized different facets of this process, laying the groundwork for contemporary understandings.

Kingsley Davis (1965) conceptualized urbanization primarily as a *demographic process*, defining it as the movement of populations from rural to urban areas, leading to the growth of urban settlements. Davis's formulation emphasizes the quantitative dimensions of population redistribution, identifying structural changes in settlement patterns as central to urban growth (Davis, 1965).

Louis Wirth (1938) offered a more qualitative interpretation that shifted attention from numbers to social relations. Wirth argued that urbanism is a distinct "way of life" shaped by *large population size, high density, and social heterogeneity*. According to Wirth, these conditions generate new forms of social organization, characterized by impersonal social interactions, diversified social roles, and weakened primary group ties (Wirth, 1938). This theoretical lens highlights how urban life alters patterns of social engagement and restructures everyday experiences.

Beyond early Chicago School perspectives, scholars have linked urbanization to broader economic and political processes. Manuel Castells (1977) situated urbanization within the logic of capitalist development, arguing that cities are shaped by the spatial dynamics of production, consumption, and social conflict. From Castells' perspective, urban institutions, including markets, governance structures, and public services, are both products and producers of the capitalist urban order (Castells, 1977). This view underscores that urbanization cannot be understood in isolation from economic forces and state-society dynamics.

More recent scholarship has extended these ideas to global and structural dimensions. According to the *Encyclopaedia Britannica*, urbanization involves the increasing concentration of populations in urban areas accompanied by shifts in economic roles and social patterns, often resulting from industrialization and structural economic change (Britannica, 2024). United Nations reports similarly describe urbanization as a global demographic trend driven by rural-urban migration, natural population increase, and the expansion of urban boundaries (UN DESA, 2018). These global perspectives emphasize urbanization as both a quantitative and structural transformation affecting nearly all regions of the world.

Contemporary sociologists also highlight the *processual and relational* aspects of urbanization. Scholars such as Saskia Sassen emphasize that urbanization involves not just demographic concentration but also the strategic positioning of cities within global networks of finance, technology, and governance. According to Sassen's work on global cities, urbanization transforms not only local social structures but also transnational economic and political linkages (Sassen, 2001). This approach broadens the sociological lens to include how urban centers function within global systems of power and capital.

Sociological perspectives on urbanization reveal it to be a process that combines demographic change with institutional and spatial transformation. It affects how people live, interact, and organize their social worlds. Urbanization reshapes social relations, restructures economic processes, and reconfigures spatial environments, making it a central focus for

understanding contemporary social transformations.

Private Hospitals in Urban Contexts

The role of private hospitals within urban health systems has received increasing scholarly attention, particularly in developing countries where public health care infrastructure often struggles to meet the demands of rapidly growing urban populations. International health organizations and scholars broadly agree that private hospitals are distinguished primarily by their ownership, financing, and management structures. The World Health Organization defines private hospitals as health care institutions owned and operated by individuals, companies, or organizations other than the government, providing medical services for a fee (WHO, 2010). This definition foregrounds the institutional and financial characteristics that differentiate private hospitals from publicly funded health care facilities.

In the Indian context, scholars have emphasized the organizational and spatial dimensions of private hospitals within mixed health systems. R. B. Singh characterizes private hospitals as part of the broader private health sector marked by individual or corporate ownership, user charges, and independent management, functioning either in complementarity or competition with public health institutions (Singh, 2014). This perspective situates private hospitals within the geography of Indian cities, where public and private health care services coexist and interact unevenly across urban space. From a health economics standpoint, Peter Berman conceptualizes private hospitals as integral components of mixed health systems, arguing that they often emerge to fill gaps left by public health care services and expand access through market-based mechanisms (Berman, 1998; Berman & Ahuja, 2008). This interpretation highlights the demand-driven nature of private hospital growth, particularly in urban areas characterized by higher population density, rising incomes, and increased health awareness.

Empirical studies further indicate that private hospitals tend to concentrate in urban centres due to the availability of better infrastructure, greater purchasing power, and a critical mass of potential patients (Baru et al., 2010). While such concentration enhances service availability for certain urban populations, it also raises concerns regarding spatial inequality and unequal access to health care, especially for peri-urban and marginalized groups.

Taken together, these conceptualizations suggest that private hospitals are not merely medical facilities but complex urban institutions shaped by ownership structures, market dynamics, and state capacity. In rapidly urbanizing cities like Aizawl, private hospitals emerge as critical nodes within the urban health system—responding to demographic change while simultaneously reshaping urban space through their location, expansion strategies, and associated economic activities.

Space, Institutions, and Urban Form

Understanding the spatial implications of private hospitals within urban environments requires moving beyond a purely locational analysis to a sociological conception of space as socially produced and institutionally mediated. Henri Lefebvre's theory of the production of space provides a foundational framework for such an analysis. Lefebvre (1991) argued that space is not a neutral or passive backdrop for social activity but is actively produced through the interaction of social practices, representations of space, and lived experiences. In this framework, urban space is continuously shaped and reshaped by institutions, power relations, and everyday practices.

Applying Lefebvre's perspective to urban health infrastructure reveals that hospitals do not merely occupy pre-existing urban space; rather, they actively participate in producing space. Through their location, scale, and daily operations, hospitals attract flows of patients, health care workers, capital investment, and auxiliary services, thereby restructuring surrounding urban areas. The presence of a hospital can transform residential neighbourhoods into mixed-use zones, intensify land use, and reorient patterns of mobility and economic activity. Thus, health care institutions function as spatial anchors within the urban fabric, influencing both material landscapes and social interactions.

Building on Lefebvre's insights, Setha Low's work on space and culture offers an important anthropological and sociological extension of spatial theory. In *Spatializing Culture*, Low (2017) emphasizes that space is embedded with cultural meanings and social power, arguing that institutions shape how space is perceived, used, and experienced by different social groups. According to Low, spatial arrangements reflect broader cultural logics and social hierarchies, making space a critical site for examining inequality and exclusion. From this perspective, hospitals can be understood as culturally and socially charged spaces that structure access to health care, regulate movement, and symbolize authority, expertise, and modernity within the city.

Low and Lawrence-Zúñiga (2003) further argue that institutions play a key role in the social production of space by organizing everyday practices and embedding power relations into the built environment. Hospitals, as formal institutions, regulate entry, movement, and interaction through architectural design, zoning regulations, and professional hierarchies. These spatial controls shape how different social groups, patients, caregivers, medical professionals, and informal workers experience urban space. In rapidly urbanizing cities, such institutional spatialization often intersects with class, mobility, and access to resources.

Robert K. Merton's theory of manifest and latent functions provides an additional sociological lens for understanding the unintended spatial consequences of institutional growth. The manifest function of private hospitals is the provision of health care services. However, their latent functions include a range of unintended outcomes that significantly affect urban form. These include increased land and rental values in surrounding areas, the clustering of pharmacies, diagnostic centers, food stalls, and transport services, and the intensification of traffic congestion and infrastructural strain (Merton, 1968). Such latent effects demonstrate how institutions can reshape urban space in ways not explicitly planned or anticipated.

Urban sociologists have also highlighted how institutional expansion contributes to broader processes of spatial

inequality and urban restructuring. Sharon Zukin (1995) argues that powerful institutions and market forces play a central role in shaping urban landscapes, often privileging certain uses and users of space while marginalizing others. In the context of private hospitals, the concentration of health care facilities in already developed urban zones may reinforce uneven spatial development, leaving peripheral or economically weaker areas underserved.

Taken together, these theoretical perspectives suggest that private hospitals function as more than healthcare providers within urban settings. They are key institutional actors in the production and reconfiguration of urban space, operating through both intended functions and unintended consequences. In cities like Aizawl, where geographical constraints, relative rapid urbanization, and limited land availability intersect, the spatial impacts of private hospitals become particularly pronounced. Examining these institutions through the combined lenses of Lefebvre, Low, and Merton enables a nuanced sociological understanding of how health care infrastructure contributes to urban form, spatial practices, and lived experience.

METHODOLOGY

This study adopts an integrated quantitative–qualitative research design to examine the interdependence between urbanization and private hospitals and to analyze the spatial implications of this relationship within the Aizawl Municipal Corporation (AMC) area. Mixed- method approaches are particularly suitable for urban sociological research as they allow the integration of statistical patterns with institutional practices and lived spatial experiences (Creswell & Plano Clark, 2018). The methodological framework is informed by sociological theories of urbanization and space, particularly Henri Lefebvre’s concept of the social production of space and Setha Low’s understanding of space as culturally produced, institutionally regulated, and socially experienced (Lefebvre, 1991; Low, 2017).

Study Area

The study is confined to the Aizawl Municipal Corporation (AMC) area, the principal urban center of Mizoram. Aizawl is a hill city characterized by rapid population growth, limited availability of buildable land, and increasing pressure on urban infrastructure. These spatial and geographical constraints make Aizawl a particularly relevant site for examining how health care institutions interact with urbanization processes and reshape urban space. Hill cities, as scholars note, often experience intensified spatial effects of institutional concentration due to terrain-induced limitations on horizontal expansion (UN-Habitat, 2014).

Quantitative Methods

Population and Demographic Analysis

Secondary demographic data were used to examine urban population growth in Aizawl and to distinguish between natural increase and migration-driven urban growth. Baseline population figures were taken from the Census of India (2011), while population estimates for subsequent years were derived from census-based demographic projections to analyze longitudinal trends.

Vital statistics were obtained from the Annual Report on Registration of Births and Deaths, Mizoram (2021). The reported crude birth rate (20.18 per 1,000 population) and crude death rate (7.28 per 1,000 population) for urban Aizawl were used to estimate the natural rate of population increase at 12.9 per 1,000 population per year, following standard demographic practice (Weeks, 2015).

Net migration was estimated as the residual component of population change after accounting for natural increase. This residual was interpreted as migration associated with urbanization and analyzed using Lee’s (1966) push–pull framework, wherein employment opportunities, educational institutions, and access to health care, particularly private hospitals, operate as key urban pull factors shaping population inflows.

Qualitative Methods

Sampling Technique

Qualitative data were collected using purposive sampling, a non-probability sampling technique commonly employed in sociological research when respondents are selected based on their relevance to the research problem (Bryman, 2016). The respondents consisted of proprietors and owners of private hospitals operating within the AMC area.

This sampling strategy ensured that data were collected from actors directly involved in institutional decision-making regarding hospital location, expansion, and operation. Such respondents are considered key informants in urban institutional research (Yin, 2018).

Interview Schedule and Data Collection

Primary qualitative data were collected using a semi-structured interview schedule administered through KoboToolbox, a digital data collection platform increasingly used in social science fieldwork for its reliability and flexibility. Semi-structured interviews allow researchers to maintain comparability across responses while also enabling respondents to articulate their own interpretations and experiences (Kvale & Brinkmann, 2015)

Interview questions focused on perceptions of urban population growth, demand for health care services, institutional expansion plans, and spatial challenges such as traffic congestion, accessibility, and land constraints.

Visual Sociology and Spatial Analysis

Incorporating Setha Low’s conceptualization of space as socially and culturally produced, the study employed visual sociology as a supplementary methodological tool. Visual sociology examines how images both reflect and constitute

social realities and is particularly useful for studying urban institutions and spatial practices (Harper, 2012). Photographic documentation was used to record private hospitals and their immediate surroundings, including adjacent commercial establishments, traffic patterns, pedestrian movement, and land-use intensity. This approach draws on visual anthropology’s notion of the “camera as a witness,” where images function as empirical evidence of spatial relations and institutional effects (Low & Lawrence-Zúñiga, 2003; Pachau, 2014). Visual observations were analytically linked to Setha Low’s argument that institutions organize space through cultural meanings, regulatory practices, and power relations, shaping how space is accessed and experienced by different social groups (Low, 2017).

Analytical Framework

Data analysis was guided by a combined theoretical framework drawing on Lefebvre’s concept of the production of space, Setha Low’s spatial anthropology, and Robert K. Merton’s theory of manifest and latent functions (Lefebvre, 1991; Low, 2017; Merton, 1968). While the manifest function of private hospitals lies in health care provision, the analysis paid particular attention to latent spatial consequences such as increased land values, commercialization of surrounding areas, traffic congestion, and infrastructural strain.

Qualitative interview data and visual materials were thematically analyzed to identify recurring patterns related to urban growth, institutional expansion, and spatial transformation (Braun & Clarke, 2006). Quantitative findings were interpreted alongside qualitative insights to produce a holistic sociological understanding of how private hospitals both respond to and reshape urbanization processes in Aizawl.

FINDINGS AND CONTEXTUALIZATION

This section presents the empirical findings of the study based on demographic data, institutional data on private hospitals, and qualitative responses from hospital proprietors within the Aizawl Municipal Corporation (AMC) area.

Interdependence Between Urbanization And Private Hospitals Within AMC Area

The findings derived from both secondary demographic data (Tables 1 and 2) and primary data collected through interview schedules administered to private hospital respondents using KoboToolBox reveal a strong and mutually reinforcing relationship between urbanization and the growth of private hospitals in Aizawl.

Between 2011 and 2026, Aizawl’s population increased from **293,416 to an estimated 439,000**, representing a total increase of **145,584 persons**. As indicated in Table 1, this growth is driven almost equally by **natural increase (70,670)** and **net migration and urbanization (74,914)**. The relatively higher contribution of migration underscores the role of Aizawl as a major urban center attracting population from surrounding rural and semi-urban areas.

Table 1. Decomposition of Urban Population Growth in Aizawl by Natural Increase and Net Migration (2011–2026)

Interval	Actual Total Increase	Total Natural Increase (Estimated)	Net Migration or Urbanization (Estimated)
2011-2015	33584	15270	18314
2015-2019	34000	16800	17200
2019-2023	42000	18600	23400
2023-2026	36000	20000	16000
TOTAL	145584	70670	74914

Drawing on *Everett S. Lee’s (1966) migration theory*, population movement is understood as the outcome of interacting push and pull forces between places of origin and destination. In the case of Aizawl, constraints in rural areas; such as limited health care infrastructure, fewer employment opportunities, and inadequate services operate as push factors, while the concentration of medical facilities, administrative functions, and urban amenities in the city serve as strong pull factors. The consistently high levels of net migration across the study period underscore the role of urban services. Amongst other factors implying deductive reasoning along with all the respondents saying that their hospitals attract patients from rural or peri-urban special emphasis is placed on health care provision in this context, in influencing migration decisions.

The expansion of private hospitals in Aizawl mirrors this urban growth trajectory. As shown in Table 2, the number of private hospitals increased from 4 in 2011 to 13 by 2023, paralleling periods of accelerated population growth. The most notable expansion occurred between 2011– 2019, when the population increased (estimated) by over 67,000 and the number of private hospitals nearly tripled. This temporal correspondence indicates that private health care development has been responsive to rising urban population and service demand.

Table 2. Urban Population Growth and Expansion of Private Hospitals in Aizawl (2011–2026)

Sl. No.	Year	Population of Aizawl (Estimate)	No. of Private Hospitals in Aizawl
1	2011	293, 416 (official census)	4
2	2015	327000 (estimated derived trend)	7
3	2019	361000 (estimated derived trend)	11
4	2023	403,000 (Census projection via research source)	13
5	2026	439,000 (recent projected estimate)	13

Qualitative findings from interviews with hospital proprietors further substantiate this relationship. *All respondents expressed the view that urbanization has positively contributed to the growth of their hospitals. Respondents consistently reported that increases in Aizawl’s urban population have led to higher demand for health care services, including outpatient consultations, diagnostic services, and inpatient care. Urban expansion was perceived not merely as a background demographic change but as a direct driver of increased patient inflow and service utilization.*

A significant qualitative finding relates to institutional expansion strategies. *All respondents indicated plans to expand their hospitals over the next ten years in anticipation of continued population growth in Aizawl. These plans include vertical expansion of existing buildings, construction of new facilities, and, in some cases, the establishment of additional branches. The preference for vertical expansion reflects the spatial constraints of Aizawl as a hill city with limited availability of land, linking institutional growth directly to urban form.*

Respondents also reported that urban expansion has positively affected hospital operations by improving accessibility and connectivity. Expansion of residential areas and transport infrastructure within the AMC area was perceived to have enhanced patient access and operational efficiency. Additionally, *all respondents agreed that continued population growth will create a future need for additional hospitals in Aizawl, indicating that private hospital proprietors interpret urbanization as a long-term structural process rather than a temporary phase.*

Taken together, *the findings demonstrate that urbanization and private hospitals within the AMC area are structurally interdependent.* Migration-driven urban population growth creates sustained demand for private health care services, while the expansion of private hospitals enhances the functional attractiveness of Aizawl as an urban center. The convergence of demographic trends, statistical association, and institutional perceptions confirms that private hospitals function as key urban institutions that both respond to and reinforce the process of urbanization in Aizawl.

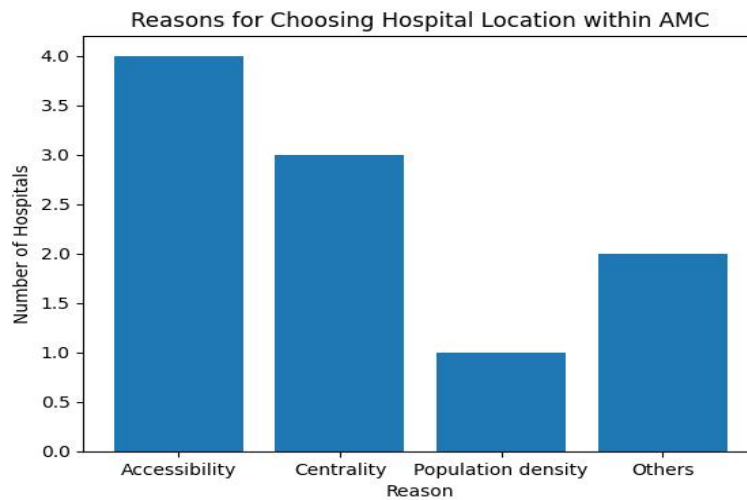
Spatial Implications Associated with the Growth of Private Hospitals within the AMC Area

The spatial implications of private hospital growth within the Aizawl Municipal Corporation (AMC) area are evident from both the quantitative survey graphs generated through KoboToolBox and the qualitative interpretations of respondents. These findings demonstrate how private health care institutions actively shape urban space through spatial concentration, land-use intensification, and the generation of secondary economic activities.

Spatial Concentration and Locational Centrality

The graph depicting locational choice (Figure 1) shows that accessibility (66.67%) and centrality (50%) were the primary reasons for selecting hospital sites, while population density played a secondary role. During fieldwork, respondents frequently emphasized spatial constraints as a defining challenge, a concern that also emerged during site observations.

(Fig. 1.)



This spatial clustering reflects Lefebvre’s (1991) argument that urban space is socially produced through institutional strategies. Hospitals do not simply occupy available land; rather, they actively select and consolidate central urban locations to maximize patient reach, thereby reinforcing spatial concentration within the city.

Latent Spatial Consequences and Health Care-Led Micro-Economies

Analysis of the responses indicates that private hospitals within the AMC area generate a range of latent spatial consequences that extend beyond their primary function of health care delivery. These consequences manifest in the formation of localized micro-economies, informal economic practices, and subtle transformations in surrounding land-use patterns.

All respondents reported the presence of pharmacies operating within or immediately around hospital premises (100%), indicating a strong and consistent spatial linkage between health care institutions and allied. Further, data show that within a 100-metre radius of hospital locations, multiple pharmacies are clustered, with one-third of hospitals reporting more than five pharmacies nearby and another one-third reporting two to three pharmacies. This clustering reflects a process whereby health care facilities act as anchors for specialized service agglomeration, reshaping surrounding urban space.

In addition to pharmacies, *all respondents confirmed the presence of food stalls, tea shops, restaurants, and small eateries catering primarily to patients, attendants, and hospital staff,* as shown in Figures 2 & 3. The scale of dependency on hospital-generated footfall is significant: two-thirds of respondents indicated that between one and four small businesses rely directly on hospital activity, while others reported between nine and twelve, or even more than twelve, dependent enterprises. These findings demonstrate the emergence of health care-led micro-economies, wherein hospitals function as nodal points for everyday economic life.

(Fig. 2 & 3: Latent spatial outcomes)



Informal economic practices further reinforce these spatial dynamics. *A majority of respondents reported that informal vendors such as fruit sellers and hawkers gather around hospital premises either frequently or sometimes, suggesting that hospitals create predictable zones of economic opportunity within the urban landscape.* Notably, two-thirds of hospitals also reported leasing internal or adjacent spaces to external businesses such as cafeterias, pharmacies, or

ATMs, formalizing some of these economic linkages within institutional boundaries

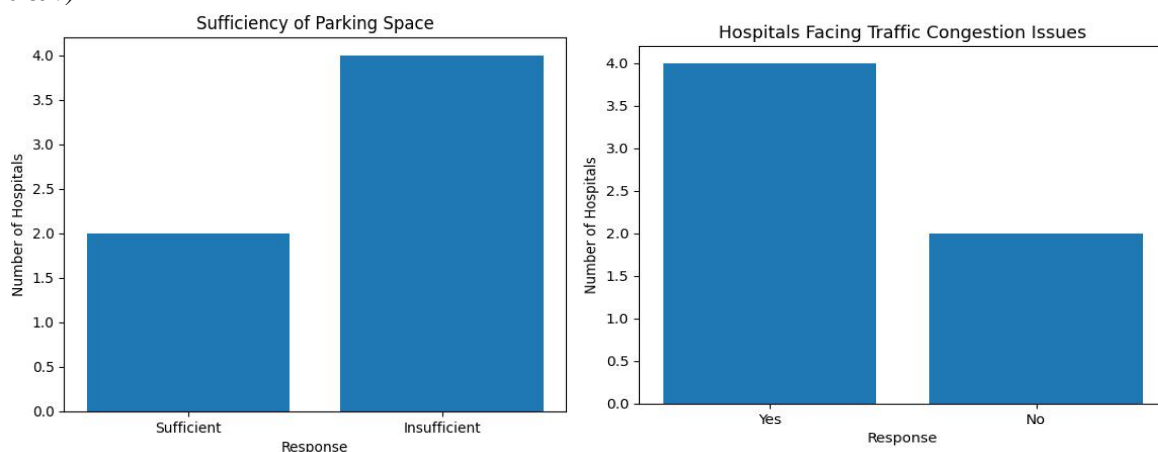
(Fig. 4 & 5: Latent spatial outcomes)



These patterns exemplify Robert K. Merton’s concept of *latent functions*, wherein institutions generate unintended but socially consequential outcomes alongside their manifest purposes. While private hospitals are established to provide medical care, the data clearly show that they simultaneously produce economic spill overs that restructure surrounding spaces and livelihoods.

Spatial consequences also extend to property dynamics. A substantial majority of respondents (83.33%) perceived that the presence of their hospital has contributed to, indicating indirect effects on the urban land market. Figures 6 & 7 reveal a spatial contradiction: although 100% of hospitals have designated parking, 66.67% report insufficient parking capacity, and 66.67% experience traffic congestion in their vicinity (Figures 8 & 10). This indicates that health care- led spatial concentration places pressure on existing transport infrastructure, even when institutions attempt internal spatial adjustments. Moreover, half of the hospitals reported the existence of designated street parking areas that generate income for nearby parking attendants or informal parking services, further embedding hospitals within local economic circuits.

(Fig. 6 & 7)



(Fig. 8 & 9: Latent spatial outcomes)



Despite the visible expansion of informal and semi-formal economic activities, none of the respondents reported challenges in managing such activities around hospital entrances or footpaths. This suggests a degree of spatial normalization, where health care-centered economic practices are accepted as routine features of the urban environment. While respondents did not uniformly articulate these effects in theoretical terms, their descriptions clearly pointed toward Setha Low's understanding of space as relational and socially produced. These findings indicate that private hospitals actively shape not only physical space but also everyday social and economic interactions. Hospitals emerge as socially embedded urban nodes, structuring movement, commerce, and informal practices in their vicinity. Collectively, the data confirm that private hospitals within the AMC area generate latent spatial outcomes that contribute to localized economic vitality while simultaneously reconfiguring patterns of land use and urban interaction.

CONCLUSION

This study demonstrates that urbanization and private hospitals in Aizawl are deeply interdependent processes with significant spatial implications. Urban population growth has created sustained demand for private health care services, while the expansion of private hospitals has actively reshaped urban space through land-use intensification, commercial clustering, and infrastructural pressure. By applying sociological theories of urbanization and space, the study highlights the need to view private hospitals not merely as service providers but as influential urban institutions that reshape urban space utilisation.

The findings underscore the importance of integrating health care planning into broader urban planning frameworks, particularly in spatially constrained hill cities like Aizawl. Without such integration, the continued expansion of private hospitals may exacerbate congestion and spatial inequality. Rather than functioning as passive responses to demographic change, private hospitals emerge from this study as active institutional agents that participate in the production and reconfiguration of urban space. This spatial configuration is consistent with Lefebvre's argument that urban space is actively produced through institutional practices and structural conditions, rather than functioning as a neutral backdrop for social processes (Lefebvre, 1991). The study documents the emergence of health care-led micro-economies in the form of pharmacies, eateries, informal vendors, parking services, and other small businesses clustered around hospital premises. These outcomes exemplify Merton's concept of latent functions illustrating how institutions produce unintended yet socially significant effects that reshape land use, economic activity, and everyday spatial practices (Merton, 1968).

Viewed through Setha Low's conceptualization of space as relational, culturally constituted, and shaped by institutional power, private hospitals in Aizawl emerge as socially significant urban nodes rather than merely functional service locations. These institutions influence patterns of movement and interaction, draw populations from rural and peri-urban areas, and play a mediating role in access to health care services, employment opportunities, and associated economic activities. Through these processes, private hospitals contribute to reinforcing Aizawl's position as a regional health care center while simultaneously producing new spatial hierarchies and power relations within the urban environment (Low, 2017).

In conclusion, this research contributes to urban sociology and health geography by demonstrating that private hospitals are not merely outcomes of urbanization but constitutive elements of it. By foregrounding their spatial implications, the study highlights the need for interdisciplinary planning approaches that align urban growth, health care provision, and spatial justice in rapidly urbanizing cities like Aizawl. Future urban policy must therefore adopt a holistic approach that recognizes the spatial dimensions of health care infrastructure and its role in shaping urban space and urban life.

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SUPPLEMENTARY INFORMATION

Supplementary Appendix 1:

2	GREENWOOD HOSPITAL	BAWNGKAWN	1992
4	AIZAWL HOSPITAL	KHATLA	2006
6	BN HOSPITAL	KULIKAWN	2015
8	Redeem Hospital	College Veng	2016
10	EBENEZER HOSPITAL	CHAWNUI VENG	2018



Supplementary Appendix II:

A non-pictorial version of the tables provided in the paper. Table 1.

Interval	Actual Total Increase	Total Natural Increase (Estimated)	Net Migration or Urbanization (Estimated)
2011-2015	33584	15270	18314
2015-2019	34000	16800	17200
2019-2023	42000	18600	23400
2023-2026	36000	20000	16000
TOTAL	145584	70670	74914

Table 2

SL. No	Year	Population of Aizawl (Estimate)	No. of Private Hospitals in Aizawl
1	2011	293, 416 (official census)	4
2	2015	327000 (estimated derived trend)	7
3	2019	361000 (estimated derived trend)	11
4	2023	403,000 (Census projection via research source)	13
5	2026	439,000 (recent projected estimate)	13