

NEIGHBOURHOOD PLANNING AS THE NEW NORMAL FOR POST-PANDEMIC CITIES

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ABSTRACT: *The world went through a difficult time resulting in the progressive changes during the COVID-19 pandemic to the urban fabric. The shifting urban paradigms amid the COVID-19 pandemic allowed particularly in cities of the developing world like Hyderabad, and Sindh in Pakistan where a series of complete lockdowns and rapid urbanization affected the lives of the people, to reshape themselves accordingly. Keeping in mind the dynamics of the developing countries and problems associated with the pandemics in the context of Hyderabad, the Neighbourhood planning approach proposed by the famous urban planner Clarence Perry appears to be the possible solution. To validate this hypothesis, the research examines and synthesizes a relationship between pandemics, especially COVID-19, and urban planning approaches using the close-ended survey technique. As a consequence of these results, the research confirms the appropriateness of this approach for cities like Hyderabad and acts as a precedent for other similar cities within third-world countries.*

Keywords: COVID-19, Pandemic, Urban Planning Paradigms, Neighbourhood Planning, Low-density Planning, Urban Design, Post-Pandemic Cities.

1 INTRODUCTION

In the contemporary world, cities are centres where the majority of the world population resides [1] and from where innovation and economic growth root out [2]. Nevertheless, the high density of people and functions within the urban centres make them expose to various man-made and natural hazards [3]. Weighing these variables, several scholarships have been published on the inter-relationship of cities and disasters, pointing out the impact disasters had on cities and the responses of cities towards them. Moreover, while this is not the first time cities have been affected by the epidemics [4], a finite scholarship pertinent to urban centres and pandemics was present earlier to the rise of the Novel Coronavirus Disease (COVID-19) pandemic. This pandemic has resonated the subject of urban susceptibility to future pandemics provoking the researchers to the pandemic scholarship. The human invasion of the natural environment through climate change and destruction of natural habitats is a sign that cities might come across similar or worst pandemics in the future [5], and if we could understand the dynamics and elemental causes of these pandemics, its effects on the cities, a wide range of precautionary measures, prior preparations and responses can be developed [6]. The World Health Organisation (WHO) reports that “healthy cities and the city planning process are background papers supporting the work of the World Health Organisation” [7]. This is true concerning the current pandemic and must be noted that the design of the current cities should stress the provision of a healthy urban environment to its individuals. The correlation between the ingredients of the city i.e., the building edifices, streets and walkways, recreational parks, and infrastructural framework of the city undoubtedly touch upon the character and efficacy of life for people within cities [8]. In developing countries like Pakistan, where lockdowns and social distancing lead to social isolation and the suffering of the underprivileged class [9]. This case is pretty much visible in the city of Hyderabad, Sindh. Next to Karachi, which is Pakistan’s socio-economic hub, Hyderabad is being developed as the nexus for rural settlers to earn their livelihood and live a quality life [10]. Moreover, the series of micro and complete lockdowns in

cities like Hyderabad, where a major percentage of the population is below the poverty line, influenced and left a scar on the lives of people during this pandemic [11]. The increased urbanization ratio within the city due to massive migration from rural areas has led to the conversion of agricultural lands into commercial and residential lands. However, these land uses lack recreational facilities like Parks and social clubs which once were places of gatherings for the residents [12]. In this regard, planning and designing initiated at the neighbourhood scale keeping the locals at the centre of the process can act as an intuitive approach towards the current pandemic. As Mumford indicated, neighbourhoods are the “social facts” of cities [13]. It is these neighbourhoods that have the potential to transform the consequences and contribute to the social aspects and development [14]. Hence, this research analyses the scholarships in the context of Pakistan partaking in the case study of Hyderabad, Sindh through a close-ended questionnaire survey technique and suggests neighbourhood planning as a new normal for post-pandemic cities.

2 METHODOLOGY

2.1 Research Design

The scholarship applied qualitative research to examine the neighbourhood planning approach as a way forward for developing countries like Pakistan. Google forms platform was exercised to collect relevant data from the respondents.

2.2 Research Audience

The research audience was 362 diversified residents of Hyderabad city who were selected through a random sampling technique.

2.3 Research Tools

Close-ended Likert scale questionnaire was developed to determine the feedback of the audience related to COVID-19 and the urban planning paradigm shift. The questionnaire was developed by the researchers keeping in mind the context of Pakistan.

2.4 Data Collection Procedure

The random sampling methodology was applied to Hyderabad city and an audience of 384 must participate in the research for appropriate results. The questionnaire was developed and

filled out on Google Forms platform by 362 participants representing their stance on the research.

3 RESULTS AND DISCUSSION

The analysis of the research methodology related to the post-pandemic cities, brings forward that cities should be planned as small neighbourhoods so that the impacts of such pandemics on socio-economic conditions, environment, and urban design can be minimized. Hence, based on the Likert-scale survey analysis Figure 1 shows the elements that form the basis of future cities that should be considered by planners and architects.



Figure 1 Elements of Neighbourhood Planning

Health

The COVID-19 pandemic emphasized the need for healthy neighbourhoods and cities. This paradigm has allowed us to revert to our years-old tradition of creating airy and well-lighted spaces. This means that houses should be designed with space efficiency so that it is adequate for their users. On the other hand, remote working and digitisation required staying more at home hence, larger houses with facilities of terraces and indoor gardens are prerequisites for providing a healthy environment within homes [15]. The pandemic has also been an opportunity in disguise to bring forward public health professionals and urban planners on a single platform to develop policies at the neighbourhood and city level to ensure a healthy urban environment. This is because urban planning is the key to preventing as well as contributing to health outcomes [16]. Planners turn out to be successful public leaders when they act as catalytic agents, crossing traditional barriers to engage, discuss, and mediate among diverse stakeholders [17]. Any method must aim to establish an architecture that comprehends the numerous interrelated elements and works to connect them [18].

Urban Density

City and urban planning may need to be updated in terms of population density, which is one of the most basic variables

influencing epidemic spread; in further terms, the higher the inhabitant's density, the more the danger of infection [19]. We propose shifting focus from city areas and processes to neighbourhood-scale areas and processes. This necessitates a rethinking of small residential areas in city planning and management. Rescaling will provide more personalized attention to residents' requirements, along with a focus on the shortage and inequity of substantial amenities and adaptive methods. As a result, we see the city as a web of small-scale residential areas. Each community has a few residential buildings with basic utilities and services, as well as green open areas and adaptation measures. In this regard, it is critical to emphasize that we are not providing a deterministic 'neighbourhood-unit' approach, but rather a more intimate adaptive and manageable scale [20].

Technology

The pandemic has made us realize the importance of technology in our lives. Today, the internet is one of the necessities of life, and cities and urban centres must be equipped with technology to become cyberspaces [21]. Because the pandemic highlighted the unfairness of access owing to an absence of broadband technology - the digital divide - the inclusive plan is an appropriate instrument for strengthening municipal resilience by building infrastructure that includes not only sewer, roads, and water, but also broadband service [22]. We learned during the pandemic how key functions such as education (from pre-school through college), access to jobs, health care and services are disrupted [23]. When in-person access is disrupted or unavailable, broadband access becomes a need. In general, the pandemic has increased curiosity in smart city developments by indicating the multiple benefits of smart solutions in means of finding infected individuals, forecasting diffusion dynamics, lessening human-to-human interaction, and aiding the implementation and trailing of social distancing and quarantine rules.

Mixed-Use Developments

The mixed-land use method aims to generate a variety of suitable actions and land uses that are close together in acceptable locations and adaptable enough to react to fluctuating market conditions over time. Mixed land-use has the aspiration of creating local jobs, promoting the local economy, reducing car dependency, promising pedestrian and cycling traffic, reducing landscape disintegration, providing closer public facilities, and supporting mixed communities [24]. Mixed land-use can be implemented at various spatial levels, including cities, neighbourhoods, blocks, and buildings. Mixed land use demands a mix of residential, commercial, industrial, office, and other land uses. When varied functions coexist in the same neighbourhood, economic and residential activities must be carefully designed and managed to be harmonious and well-balanced [25]. It is necessary in contemporary times to create urban and residential areas that can accommodate a variety of purposes and roles across time.

Transportation

As a longer-term strategy, adopting Transit-Oriented Development (TOD) can assist ensure the survival of the public transportation industry while still delivering a robust and sustainable urban transportation system [26]. The core tenets of TOD are on encouraging the use of non-motorized

transportation, discouraging the use of private vehicles and motorised transportation, enhancing land use planning, designing for pedestrians, and fostering local economic growth [27]. Additionally, the strategy attempts to promote non-motorized transportation by putting employment opportunities, homes, and public open spaces close to one another as seen in the concept of a 15-minute neighbourhood [28]. Commuters reap the rewards right away because their trips are shorter and less frequent, saving them money and time [29]. People can move around a city more efficiently and readily access employment and markets, enhancing productivity [30]. TOD can be promising if its methods and policies are designed to ensure safe and long-term accessibility during eventualities such as COVID-19.

Open and Green Spaces

Providing open-space spaces is an important factor in boosting neighbourhood happiness in high-density contexts [31]. Many public areas for social interaction are owned by the government. They include places where people can assemble and participate in activities such as theatres, museums, libraries, and public sports facilities. As a result, designers' attention might be directed toward reviving recreational and social uses, restructuring according to human requirements, and developing pandemic-resilient and flexible settings. Outdoor parks and green spaces are also a human need that relieves stress and enhances psychological, physical, and mental health [32]. Naturally, the inclination towards healthy design will be complemented by rising demand for green places. Designers may require to build more spaces and practises for individualistic use when planning green zones, such as developing running tracks and paying consideration to small neighbourhood parks, as one of the innovative approaches that allow individuals to enjoy public parks by participating in what is known as social distance circles.

4 CONCLUSION

The research illustrates that scaling down cities to the neighbourhoods is the best approach and way forward for post-pandemic cities. Based on the survey analysis of the local context of Pakistan, the neighbourhood scale would allow its stakeholders to resolve major issues of health, urban density, land-use, transport and technology. Moreover, this research has proven as a stepping-stone towards creating a precedent for other developing countries in the planning of future cities.

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