

Urbanization and Mental Health

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Abstract. This paper covers the different aspects of levels of urbanization that could potentially affect mental health. This is evaluated by analyzing rates of depression and anxiety. Rapid urbanization is likely to expose the residences to more stress factors. These stress factors may appear in many aspects of their life that may affect their quality of living and overall lifestyle. These aspects of urban planning that may induce higher levels of mental health disorders are mentioned to explain why urbanization seems to influence mental health and ways that it can be resolved. Though further investigation is required to come up with a conclusion that may be generalized, it can be inferred that poorly planned rapid urbanization does seem to have a detrimental effect on mental health in general.

Keywords: Urbanization, depression, anxiety, rural, urban.

1. Introduction

This paper aims to explore how high levels of urbanization impacts mental health by evaluating the levels of depression and anxiety experienced by those who reside in urban regions and by those who are located in rural areas. Urbanization is referred as the process of people permanently populating an area leading to the creation or growth of a city. In most cases, the younger generation will tend to relocate to more urbanized regions and network with individuals of their own age group. Though many benefits come with urbanization this process such as an increase in employment opportunities and an increase in the quality of life, poorly planned urbanization could potentially cause higher crime rates and have a detrimental effect on mental health. There is a wide arrange of psychological disorders related to urbanization such as depression, anxiety, substance abuse, dementia, alcoholism, and crime. Previous studies done relating to this topic have suggested that a cultural shift from rural to urban society may lead to stress induced mental disorders [1]. Many of the mental health issues that urbanization may produce affects how one would think, feel and, act. This would ultimately affect one's quality of life. Following the rapid urbanization that has occurred in recent years, mental health awareness has increased drastically following the establishment of 28,990 organizations in the United States dedicated to a variety of mental health disorders [2]. The paper considers the possibility of depression and anxiety arising from the consequences of urbanization, and probable ways it can be minimized in the near future of urban planning.

2. Depression Levels

It is generally believed that urbanization typically results in higher levels of depressive moods and major depression. However, a recent study that was carried out provided a conflicting view with evidence for lower rates of depression in larger urban areas in the United States. The study got to that conclusion by using a model of depression driven by socioeconomic relations and an urban environment [3]. Another study related to urbanization and depression stated that depression is more prevalent in in urban than rural areas. They supported this idea by including 80 studies for meta-analysis and concluded that urban dwelling was notably linked to a higher prevalence of depression in developed countries. This occurrence was explained by differences in the general population age demographic between rural and urban settings [4]. It can be deduced that if one were to rely on different factors to measure levels of depressive moods experienced by urban dwellers, the results may very well vary between different study to study. There are several limitations in the process of

conducting research concerning mental health. Namely, small sample sizes and cultural differences. Despite the many controversies relating to the topic, it should be acknowledged that there are well-planned urbanization plans and poorly planned urbanization plans. Some prime examples for poorly planned urbanization project are overuse of gates and fences, absence of shared services, unsociable neighborhood design, and poorly thought-out streetscapes [5, 6]. The poorly planned projects relevant to depressive moods that could potentially develop into depression are unsociable neighborhood designs and overuse of gates and fences.

The presence of gates and fences are there to provide safety and security. This is a proven method that reduces crime when these barriers are placed in the appropriate places. City planners may have their best interests for your safety and security in mind when coming up with areas to place these measures, but they might pose as an obstacle to pedestrians. Even if it was thought out carefully, too many gates and fences may discourage people from taking strolls in the neighborhood as the overuse of gates and fences may come off as unwelcoming to those who decide to take a stroll in those regions [5]. Regular exercise may help improve the symptoms of depression, so even taking a stroll on a regular basis might help [7]. A way to help prevent the overuse of fences and gates while still ensuring the safety and the sense of security is to draw attention to the streets through encouraging people to walk in outdoor spaces that creates busy public spaces [5]. This encourages people to walk in these shared spaces while still feeling safe without the overuse of gates.

It is essential that neighborhoods spaces are not only safe, but also provides socialization opportunities for the residents. This may help promote friendly interactions between the residents and engender a sense of comfort while residing in the neighborhood [5]. Having neighborhood designs that encourage residents to interact with others in their community usually leads to fewer mental health problems than residents who connects less with their community [8]. This is especially notable among the older generation; it was found that neighborhood social cohesion was associated with a decrease of the symptoms of depression. Present research suggests that placing entrances that face the street, balconies that are distanced up to 10m, front porches and steps, and visible activity on the streets. Putting homes at comfortable spaces than rather have them be crowded next to one another allows visibility and provides residents with a comfortable amount of personal space. Given the safety and security of the neighborhood, the visibility of activeness on the streets attracts people to go outside of their homes to socialize [5]. These features help to minimize poor urban planning and various options are available when trying to design an urban environment that ensures the physical and mental well-being of the residents.

Table 1. The prevalence of depression in urban and rural settings [9].

Urban	Rural
5.2%	6.1%

The table 1 shows the prevalence of depression among those who reside in urban areas and those in rural areas. Judging by the statistics provided, urbanization is not likely to worsen depression symptoms. Many of the related studies that have been done usually ended up with conflicting results. Among those, the poorly planned urbanization projects might have detrimental effect on mental health and urbanization plans that are well-thought to have a positive influence on mental health. Statistically speaking, it is estimated that 2.6 million adults that reside in rural areas suffer from depression with a higher prevalence of depression among rural populations than urban populations [9]. These findings were explained by differences in population characteristics and a lower quality of life experienced by rural populations [9]. Despite a higher prevalence of depression in rural regions, there is still not enough evidence to come up with a definite conclusion due to the inconsistent results. Despite the inconsistency of various study results, I consider well-planned urban environments to be beneficial to reduce depression symptoms as a likely possibility with the level of research present. This can be supported by the higher prevalence of depression in rural areas and stronger socioeconomic bonds [3, 9].

3. Anxiety Levels

New opportunities, innovations, social benefits, and diversity are a few of the many benefits that urbanization brings about [10]. Unlike the slower paces of life in rural regions, life in the city tends to be fast paced. The rapid paced urban lifestyle may cause stress and anxiety. As mentioned before, those with stronger bonds with their community or social network experience fewer mental disorders [3]. However, there are numerous cases in which people find it hard to connect with others due to social isolation and social inequalities. This was put up to test when the COVID-19 pandemic caused cities to go through a global quarantine response. The quarantine was then related to senses of anxiety and loneliness due to the lack of social interactions. New evidence also suggests a relationship between anxiety and social isolation [11]. There are also recent findings that suggest the quality of urban neighborhoods are linked to both the presence and severity of anxiety disorders. Previous findings indicate architectural and space design may increase anxiety and trigger trauma [12]. Earlier research also suggests that spending time in green spaces can positively affect mental health but with the decreasing space available in urban regions, green spaces are getting smaller [10]. Following the decrease of urban green spaces, people are now analyzing previous methods and using them to create greener spaces in the city. Specifically, the idea of creating mini forests that originally came from Akira Miyawaki. His method enabled a mature forest to be able to grow quickly in a small space. These mini urban forests allow people to enjoy nature without having to leave the city altogether [13]. The increase of green space may encourage people spend more time to connect to nature and may even reduce symptoms of anxiety [14]. The way that urban streets are designed are quite vital to the overall cityscape as they are quite widespread within urban regions. If the streets were to be designed without much thought, it may take away senses of belonging and safeness. Residents will most likely want to be in places that they feel safe in, so having desolate streets in the city will most likely discourage pedestrians and may come off as unwelcoming. Desolate streets are typically characterized by blank building facades, vacant lots, no shopfront, and windows. Public streets without people, or any signs of people may generate confusion and anxiety. To put life into the vacant streets, urban planners or the local government could encourage people to go outside more often by placing public benches, providing shared services, and host public events [6]. Evidence for urbanization induced anxiety is not only quite consistent with the majority of results stating an increase in levels of anxiety, but the prevalence is also increased by 21% in urban settings [12, 15].

4. Conclusion

Though urbanization may not have the potential to induce depressive moods, it can be inferred that urbanization is associated with anxiety disorders which can be supported by the prevalence of the disorder. However, these findings are not able to represent how urbanization affects mental health in general, only certain aspects. Cultural differences and different age demographics within each city may also influence the results. Though further research is needed to come up with a conclusion that is able to be generalized, it can be deduced that poorly planned urbanization does tend to have a negative effect on mental health. Without coming up to a definite conclusion, urban planners may take mental well-being when implementing their urban designs and to promote mental health awareness so that people may acknowledge the importance of mental well-being and seek help when necessary.

References

- [1] Srivastava, K. (2009). Urbanization and mental health. *Industrial Psychiatry Journal*, 18(2), 75. <https://doi.org/10.4103/0972-6748.64028>
- [2] Mental health organizations. (n.d.). Cause IQ. <https://www.causeiq.com/directory/mental-health-organizationslist/#:~:text=There%20are%2028%2C990mental%20health,List%20of%20mental%20health%20organizations>

- [3] Stier, A. J., Schertz, K. E., Rim, N. W., Cardenas-Iniguez, C., Lahey, B. B., Bettencourt, L. M. A., & Berman, M. G. (2021). Evidence and theory for lower rates of depression in larger US urban areas. *Proceedings of the National Academy of Sciences*, 118(31). <https://doi.org/10.1073/pnas.2022472118>
- [4] Xu, C., Miao, L., Turner, D., & DeRubeis, R. (2023). Urbanicity and depression: A global meta-analysis. *Journal of Affective Disorders*, 340, 299–311. <https://doi.org/10.1016/j.jad.2023.08.030>
- [5] Reporter, G. S. (2020b, February 3). Five urban design mistakes that create unhealthy and inactive communities. *The Guardian*. <https://www.theguardian.com/housing-network/2015/jul/28/urban-design-mistakes-unhealthy-inactive-communities>
- [6] You are being redirected. . . (n.d.). <https://smartgrowth.org/how-bad-urban-design-makes-san-diego-feel-unsafe/>
- [7] Depression and anxiety: Exercise eases symptoms. (2023, December 23). Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/depression/in-depth/depression-and-exercise/art-20046495#:~:text=Regular%20exercise%20may%20improve%20depression,them%20over%20the%20long%20term.>
- [8] Relationships and community: statistics. (n.d.). Mental Health Foundation. <https://www.mentalhealth.org.uk/explore-mental-health/statistics/relationships-community-statistics#:~:text=People%20who%20are%20more%20socially,who%20are%20less%20well%20connected.>
- [9] Rural-urban differences in depression prevalence: implications for family medicine. (2006, October 1). PubMed. <https://pubmed.ncbi.nlm.nih.gov/17009190/#:~:text=Results%3A%20An%20estimated%20.6%20million,6.1%25%20versus%205.2%25%20.>
- [10] Cronkleton, E. (2023, September 8). How living in a city affects mental health. <https://www.medicalnewstoday.com/articles/mental-health-living-in-a-city#potential-risks>
- [11] Wilkialis, L., Rodrigues, N. B., Cha, D. S., Siegel, A., Majeed, A., Lui, L. M. W., Tamura, J. K., Gill, B., Teopiz, K., & McIntyre, R. S. (2021). Social Isolation, Loneliness and Generalized Anxiety: Implications and Associations during the COVID-19 Quarantine. *Brain Sciences*, 11(12), 1620. <https://doi.org/10.3390/brainsci11121620>
- [12] Ventimiglia, I., & Seedat, S. (2019). Current evidence on urbanicity and the impact of neighbourhoods on anxiety and stress-related disorders. *Current Opinion in Psychiatry*, 32(3), 248–253. <https://doi.org/10.1097/ycp.0000000000000496>
- [13] Innovative ways to create more urban green spaces - Project Learning Tree. (2021, March 12). Project Learning Tree. <https://www.plt.org/educator-tips/urban-green-spaces/>
- [14] Green space may improve young children’s mental health. (2024, May 7). National Institutes of Health (NIH). <https://www.nih.gov/news-events/nih-research-matters/green-space-may-improve-young-children-s-mental-health#:~:text=Researchers%20found%20that%20young%20children,influence%20certain%20mental%20health%20risks.>
- [15] Silva, J. a. C. E., & Steffen, R. E. (2019). Urban environment and psychiatric disorders: a review of the neuroscience and biology. *Metabolism*, 100, 153940. <https://doi.org/10.1016/j.metabol.2019.07.004>