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Opinion Piece

Reimagining Health Care in Africa: From Biomedicine and Hospitals to a Holistic, Community-Based Model

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Abstract: The current biomedical model, which primarily focuses on treating diseased organs, has been criticized for neglecting the broader socio-political and environmental factors that influence health. This is especially evident in Africa, where conventional hospital-centric medicine has struggled to meet the needs of the population. The design of hospitals themselves often contributes to stress and negative health outcomes. While there have been calls to redesign these facilities to be more patient-centred, systemic challenges like budget constraints and regulatory inertia have stalled progress. This paper argues that a fundamental shift is needed, moving from a reactive, hospital-based system to a proactive, community-focused model. By investing in mental health and resilient urban design, we can address the root causes of illness and build sustainable communities. This approach, grounded in the African context, would reduce the burden on hospitals and prioritize the holistic well-being of individuals. Ultimately, this paradigm shift aims to create health systems that are not only equipped to treat disease but also to foster a state of complete physical, mental, and social well-being as envisioned by the World Health Organization (WHO).

Implications: This article suggests that architects, urban designers and mental health professionals should collaborate to create healthy cities that promote well-being. By focusing on upstream interventions and community-based solutions instead of solely on hospitals, they can address the root causes of illness. The practical implication is to design environments that enhance mental health and embed mental health into urban design.

Keywords: mental health; well-being; urban design; biomedicine.

1. Introduction

The preamble to the constitution of World Health Organization (WHO), defines health as not merely the absence of disease or infirmity, but a state of complete physical, mental and social well-being. This definition has not been amended since 1948, when it was signed. Despite this, biomedicine the medical system most widespread in the world, focuses on identification, and curing (when possible) diseased organs without considering the patient as a person and the context of ill health. This myopic view is reflected in hospital architecture, which for decades has been shown to cause stress and infections and to have negative impacts on outcomes (Kellert & Heerwagen, 2013). Critiques of this “biological vision” have emerged, even from within the biomedical sphere, since the beginning of the 1970 (Clavreul, 1978; Illich, 1975; McKeown, 1971). Approximately at the same time as critiques of the “biological vision” were emerging, studies focusing on the idea of the hospital as an instrument of cure, brought evidence to support the therapeutic value of appropriate architecture on staff’s performance, patients and staff's well-being, as well as medical outcomes.

Different approaches[1] have been suggested to change hospital design accordingly. Yet, they are not implemented in the public sector. The inertia is attributed to regulatory hurdles, ignorance and obscurantism of stakeholders, budget constraints, and the dominance of a pathogenic health model (Golembiewski, 2017a; Tantchou, 2020). The private sector appears open to innovation. However, when faced with reduced budgets, tight deadlines, constricted sites and profit-oriented managers, they lack the courage to go "beyond landscape planting" (Golembiewski, 2017b). Consequently, hospitals as we know them today, still have long days ahead of them, even if they have never given total satisfaction. Even if, at a global level, they've always been in *déphasage* (Simondon, 2014)[2], and in some contexts have become liars (Zevi, 1959), and sorts of junkspaces (Koolhaas, 2011). Rem Koolhaas coined the term to describe fragmented, dysfunctional spaces produced by modern architecture, here used metaphorically to describe hospitals as dysfunctional environments that are difficult to maintain and ill-equipped for local needs.

2. The Case Against Hospital-Centred Health Systems in Africa and the Need for Contextual and Sustainable Alternatives

2.1. The Case Against Hospital-Centered Health Systems in Africa

If, at a global scale, hospitals' *déphasage* is particularly highlighted during public health crises, like the late Covid 19 pandemic (Capolongo et al., 2020), in contexts like Africa, the failure of hospital medicine to serve the majority has been apparent since the 1970s, before WHO promoted the Primary health care (PHC) initiative (Brisset, 1978). At that time, most of the countries were facing economic crises and were unable to implement PHC. Economic crisis was followed by policies implemented by the International Monetary Fund (IMF), in the wake of which emerged the HIV/AIDS pandemic. The negative impact of these policies on health systems in particular has been established (Kanji et al., 1991). Now, health systems are facing urgent needs in terms of mental health, the epidemic of non-communicable diseases, with increasing rates of cancers, for which there have been calls for urgent and sustainable interventions (Chabrol et al., 2018; Ngwa et al., 2022; OMS, 2020; WHO, 2018).

It is worth noting that despite dissatisfaction, patients have not fled from hospitals as underlined by a hospital practitioner (Tantchou, 2021). This reveals "hospital culture" (Gruénais, 2001) defined as the set of practices, values, and expectations that make hospitals central to care-seeking behaviours, even when their performance is unsatisfactory. Hospitals are needed, but they have to be context-sound, or rooted in local socio-economic and cultural realities, as opposed to universal or donor-driven models. There is a need to dig and find their place in the "social roots of health and healing" (Feierman, 1985), in their environmental sustainability.

One suggested avenue has been to design hospitals as technologies for patient centered-care. This is, of course, ideologically and intellectually thought-provoking. But biomedicine cannot be patient-centred. A patient is doomed to remain silent, leaving only the symptoms to speak as highlighted by Clavreul and many others decades ago (Clavreul, 1978; Foucault, 1963; Freidson, 1984). Telemedicine, robotics, genomics, AI, are even more enforcing the "biological vision" by directing us towards a biomedicine that targets diseased organs with high precision. Besides, notwithstanding its enormous inertia (Golembiewski, 2017a), "the biological vision" remains the driving force of institutions and market – i.e. pharmaceutics, technologies.

Consequently, it seems that at this point in the history of biomedicine, we can't transform hospitals from the inside, or by direct confrontations. Innovation must emerge outside the traditional hospital framework. In contexts like Africa, innovation would only come at the end of a transformation process that has to take place outside hospitals. Yet, governments and donors are still spending a lot of money on building facilities, and buying technologies that are difficult to maintain in the long run because the material arrangements needed to have them work properly, and without discontinuities, do not exist. Nothing says more about the state of hospitals in Africa than the fact that heads of states and ministries do not seek care in their own countries and their own hospitals, even university hospitals. If the standards or the quality of care are too low for them in their own countries, and they

1 Evidence-Based Design (EBD) (Hamilton, 2006); the green building movement (Pradinuk, 2013); salutogenic buildings (Golembiewski, 2012), etc.

2 Account for when there is a mismatch between a technical object and society, when it doesn't upgrade to be in phase as society changes (Simondon, 2014).

long for the high-quality of care they can find in Europe, for which they pay in full – let's think about the amount it represents and what could be done, if we add the cost all African leaders spent on care abroad – this shows the care they have for the health of their people. I believe the architect who once told me: "you know what, everything is going to change in hospital settings when your ministers and heads of states are going to seek care in their own countries". Before that time comes, we have to find alternatives, alternatives that are not inspired by foreign thoughts, racism, commercial interests, or pharmaceutical lobbies, or informed by the priorities of the donors' communities, etc. Alternatives that are grounded in the context of Africa. The aim must be to provide the best care for the poorest, to build healthy and strong sustainable communities.

If there is no health without mental health, then one avenue is the reshaping of communities and cities for mental health. Hospitals are indeed at the end of a trajectory. We go to hospital when sick. We are sick because of things that happened before. We know that diseases are determined by biological factors such as genes, but socio-political context and the materiality of the physical environment also. The proposed approach centres on a holistic vision where health is created in communities, not just treated in hospitals. This requires leveraging the connection between the built environment and mental health.

2.2. From Hospitals to Healthy Cities: Building Resilient Communities

Research in high-income countries has shown that the built environment - architecture, urban design - and mental health have connections (Abrahamyan Empson et al., 2020; Gharib et al., 2020; Gruebner et al., 2017; Lundberg et al., 2009; Vlahov & Galea, 2002), on which it is possible to intervene to increase mental health (Capeille et al., 2018; Myers, 2020; Pedersen Zari et al., 2022; Roe & McCay, 2021; Zhang et al., 2025). We follow Leboyer and Llorca in defining mental health as a state of well-being in which every individual realizes their potential, can cope with the normal stress of life, work productively and fruitfully, is able to make a contribution to their community (Leboyer & Llorca, 2018). Mental health is therefore a requirement for a satisfying life.

Qualities of the built environment, the *shi* of assemblages (Bennett, 2010) can enable peoples to use their capacities efficiently and successfully, to develop new skills and knowledge, expand their possibilities of action, their degree of control over their tasks and the way they carry them out. In other terms, qualities of the built environment can reinforce mental health. Mental health enforces general health and the ability to identify and use one's health resources to gain health and have a healthy orientation in life and subsequently good health, well-being and quality of life. This has been conceptualized as sense of coherence – SOC (Lindström & Ericksson, 2012). Research demonstrates that the latter is associated with good health. It protects against anxiety, depression, burnout and hopelessness. It is strongly and positively related to health resources like optimism, hardiness, control and coping. Thus, it correlates positively to good mental health, perceive health and quality of life. This find echoes within the health promotion field that is about finding resources not only for health, but well-being and good quality of life (Lindström & Ericksson, 2012) and is in line with the agenda adopted by the United Nations to transform the world by 2030.

This is not a call to boycott of biomedicine, but for more than biomedicine to keep people in good health. We are aware that socio-political and economic conditions can lead to a loss of capacity for aspiration or self-esteem (Appadurai, 2013) with repercussions on mental health. However, working to identify and enforce catalysers of mental health and strengthening SOC is beside the provision of adequate care, a workable for building sustainable cities and communities that are at the same time healthy cities (The Millennium Development Goals - MDGs, goals 3 and 11), so I suggest. This opinion piece is a call for a paradigm shift that places hospitals at the end of a trajectory of illness, not at the centre of the health system. Hospitals should be re-imagined as spaces of last resort, primarily for complex and acute care.

2.2. Figures, Tables and Schemes

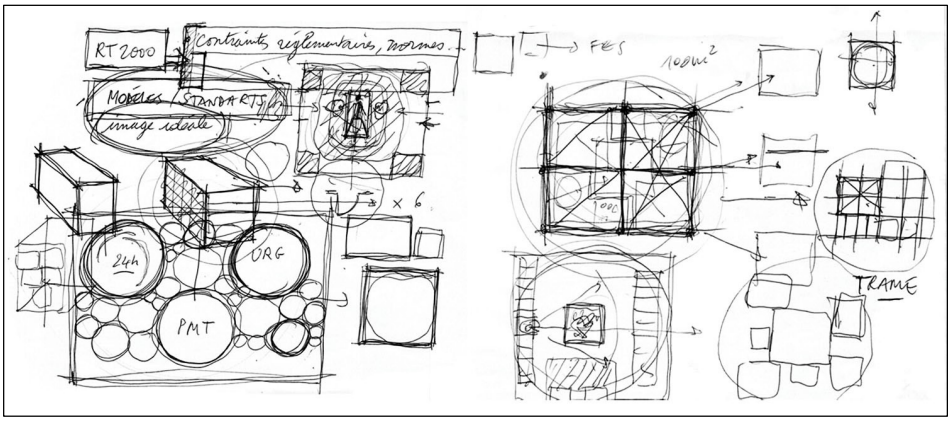

Figure 1. Moving from scratch to embed mental health promotion into urban planning (© Josiane Tantchou – Sketch from Manuel Fournier, Architect).

3. Policy and Design Recommendations

- Recognize biomedicine's indispensable role while situating it within a broader model of health that includes social and environmental determinants.
- Embed mental health promotion into urban planning.
- Engage local communities, traditional healers, and civil society organizations in the planning and design process to ensure solutions are context-sounding and sustainable.
- Establish multi-sector task forces involving ministries of health, urban planning, and local communities to create and oversee a unified strategy.
- Explore innovative financing models, such as public-private partnerships focused on urban development projects with specific health outcomes, and a greater emphasis on funding for community-based health initiatives.

4. Conclusions: A Holistic Vision for Healthcare in Africa

Transforming healthcare in Africa requires moving beyond a narrow biomedical focus. We must rethink the role of hospitals—not as the starting point of care but as the endpoint of a trajectory shaped by upstream interventions. Addressing the root causes of illness—through mental health promotion, equitable urban design, and community-based approaches—will reduce the disease burden and re-imagine hospitals as spaces of healing rather than crisis.

Biomedicine, while essential, must evolve beyond its narrow focus on diseased organs to account for the socio-political and environmental determinants of health. Mental health, as a cornerstone of well-being, must take centre stage in healthcare systems, fostering resilience, productivity, and quality of life. At the same time, the design of hospitals and urban environments must prioritize patient-centred care, reducing stress and enhancing recovery for both patients and healthcare workers.

Overcoming systemic barriers to change—such as budget constraints, regulatory inertia, and market-driven priorities—is crucial. This requires a shift from reactive to proactive healthcare systems, addressing upstream factors like social inequities and urban precarity. By alleviating the pressures on hospitals, we can better align healthcare systems with the needs of communities.

Finally, Africa must embrace contextualized solutions that reflect its unique socioeconomic and cultural realities, free from over-reliance on foreign paradigms or donor-driven priorities. By investing in sustainable, community-based models of care, we can build resilient systems that prioritize equitable access and holistic well-being.

The time has come to move beyond the constraints of biomedicine and traditional hospital models toward a holistic vision of health that prioritizes human well-being at every level. By reimagining hospitals, investing in mental health, and fostering upstream inter-

ventions, we can create sustainable healthcare systems that not only heal but also empower. This section is not mandatory but can be added to the manuscript if the discussion is unusually long or complex.

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