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The health consequences of urbanization in Nepal: perspectives from a participatory photo project with recent rural-urban migrants

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What new challenges to health do recent rural-to-urban migrants in Nepal face? How do newly urbanized individuals navigate and seek healthcare in the city? This photo essay offers a glimpse of the answers to these questions from the perspective of newly urbanized people living in Kirtipur and Pokhara, two rapidly growing urban areas in Nepal. It draws on a nine-month participatory study which used participatory photography, amongst other methods, to better understand the health opportunities and risks faced by new rural-urban migrants. All photographs presented in this essay were taken and selected by research participants and are accompanied by their narrations of what these images represent to them. Consequently, this essay provides insights into how the newly urbanized themselves understand threats to their health, and how they understand the urban health system they are confronted with as service users.

Keywords: Rural-urban migration; health seeking behaviour; health services; participatory photography; Nepal

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Introduction

As is the case in many low- and middle-income countries, urbanization is taking place rapidly in Nepal. The 2021 census found that the percentage of the population living in urban areas now stands at 66.8%, compared to 63.2% a decade earlier. This trend looks set to continue, with Nepal expected to be the second fastest urbanizing country in the world between 2018-2050, with a projected annual urbanization rate of 2% (UN DESA 2018, 52). High rates of urban growth are particularly apparent in the Kathmandu Valley, but also in other rapidly expanding urban areas, including the Pokhara Valley, and in market and border towns in the Terai southern lowlands (Bakrania 2015).

Moving from a rural village to the city is often seen as offering a variety of new economic, social, and educational opportunities. But as is true across the world, it also poses new health risks. These include non-communicable diseases resulting from lifestyle and environmental changes (Hernandez et al. 2012; Misha and Ganda 2007) and psychological stressors (Mucci et al. 2020), as well as communicable diseases caused by increasing population density, precarious and health-harming working conditions and sub-standard accommodation, often in informal settlements with inadequate basic amenities (Alirol et al. 2011; Awoh and Plugge 2016; Boadi et al. 2005; Pardhi et al. 2020).

Moving from a rural to an urban area also affects the ability of individuals to access healthcare services (Elsey et al. 2019). In theory, healthcare options available to urban residents far surpass what is provided in villages in both quantity and quality. Yet here too there are challenges, and in practice, newly urbanized individuals often have limited access to quality health care in Nepal: they can find it difficult to navigate the vastly more complex pluralistic urban health systems (Elsey et al. 2019; Ezeh et al. 2017). In Nepal, as in most of the world, the newly urbanized are not treated in health policy and planning as a specific population group with particular needs. Yet this combination of new health risks and challenges in accessing health services, we argue, means that they need to be considered as such.

To contribute towards the visibilization of the specific health needs of recent rural-urban migrants, this study sought to offer a deeper understanding of their own perceptions, experiences, and health seeking behaviours.

Methods

The photographs and narrations presented here are part of a larger multi-method participatory study involving people who have recently moved from rural areas of Nepal to Kirtipur (in the Kathmandu Valley) and Pokhara, two rapidly growing urban areas.

Participatory photography, often called *photovoice* (Wang and Burris 1997), has been widely utilised by researchers in a variety of fields, including in health research. It was a particularly appropriate methodological approach for this study for two key reasons. Firstly, as a means of data collection, it allowed participants to both reflect over time on the project's research questions, and then to utilise the photographs they had taken as a prompt for reflecting on and comparing their perceptions and experiences, and sharing that knowledge and understanding with the research team in a way that resulted in a richness of detail and understanding that non-visual methods, such as interviewing, may not have produced (Cooper and Yarbrough 2010). Secondly, as a means of communicating the concerns of this particular section of the

community (Sutton-Brown 2014), the photographs allowed for the effective communication of their concerns to wider audiences, including health service providers and planners, and readers of this article (Budig et al. 2018).

For the participatory photo project reported here, three newly urbanized persons were recruited in Pokhara and three in Kirtipur – part of a larger cohort of participants in the wider research project. The selection criteria were designed to ensure that there was a gender balance, and also that the groups represented different types of migrants (i.e., individuals who had moved to the city for a variety of reasons). Five of the participants had moved directly from a rural village to an urban area within the last five years, and one had originally migrated to a semi-urban area as an intermediate step before eventually making his way to live in Kirtipur to pursue his studies. Although all participants were offered anonymity (see details of ethical approval below), they all chose to have their names associated with the pictures and narrations presented in this article, which they saw as an important way of drawing attention to the health challenges that they believe they face.

Participants were introduced to the project's aims and participatory photography as a method during a one-day workshop. They were then asked to work in their group of three over two days, walking around their local area and photographically documenting their own views and experiences in relation to the following research questions (RQs):

1) What new challenges to your health have you encountered since you moved to the city?
2) Where do/would you go if you had a health problem?

The group then selected the photographs that they felt best represented their views and experiences in relation to these two RQs. The participants and the researchers discussed the selected photographs in a focus group setting. The commentary that follows each photograph is taken from the transcripts of those discussions, translated into English.

The project received ethical approval from the Nepal Health Research Council (Ref. 173/2020) and from the University of Sheffield Ethical Review Committee (Ref. 034081).

The first set of photographs focuses on the urban determinants of health (RQ1); the second on health services that the participants identified as being available for their potential use (RQ2). The fieldwork was carried out in January and February 2020, during the COVID-19 pandemic (although at a time when COVID rates in Nepal had fallen to a relatively low level). As such, health issues were very much in the minds of the participants, and this was reflected in some of their comments and choices of photographs. Nevertheless, it was clear that the pandemic was only one of a wide range of health concerns they had.

New challenges to health since moving to the city

The health threats on which the participants focused were those directly arising from the urban environment. They frequently compared the environmental health problems they were aware of in the city to the situation in the rural areas where they previously lived. They were clear that the authorities should be doing more to reduce the health risks they faced.

Figure 1: 'Rubbish', Kirtipur (Credit: Ammalal Sejuwal, Khila Karki, and Vishan Thami)

"We took this photo to show the problem of rubbish in our surroundings. Rubbish is thrown everywhere haphazardly and has potentially serious effects on our health. This rubbish can cause many different diseases. The ward and municipal authorities should be doing proper waste management – and people shouldn't be throwing their rubbish in the streets."

Figure 2: 'Air pollution', Kirtipur (Credit: Ammalal Sejuwal, Khila Karki, Vishan Thami)

"We took this photo to show the smoke and dust in central Kirtipur. This is made worse by the number of vehicles and poorly maintained roads. This pollution can cause different types of disease and

can damage the lungs. The authorities should properly manage the roads to control the levels of dust and smoke in the city."

Figure 3: 'Roadside seller', Pokhara (Credit: Ramu Thakuri, Shanti Bhandari, Tej Kumari Baral)

"After migrating from rural to urban areas, many people are involved in selling on the roadside for their livelihood. There is dust and dirt in the road which creates risks to their health, but they are compelled to work for a living. People suffer from different kinds of diseases due to this issue. The metropolitan city authorities should make plans and programs focusing on the poor people to protect them from dangerous working conditions."

Figure 4: 'Traffic', Pokhara (Credit: Ramu Thakuri, Shanti Bhandari, Tej Kumari Baral)

"In Pokhara we have big problems of not obeying the traffic rules, of drivers with no knowledge of traffic rules, negligence while driving vehicles, driving vehicles without a driving licence, and crossing the road recklessly. This creates big risks of death or injury on the roads."

Seeking healthcare in the city

The overcrowded nature of urban health services and the need to identify low-cost yet convenient sources of care were prominent themes in the participants' discussions of where they go to get treatment. In both Kirtipur and Pokhara, expensive and high-quality private medical facilities are available but, as for many people in Nepal, the participants' first stop is invariably a local private pharmacy or medical shop (where medical/specialized doctors provide their services; some even have diagnostic services and pharmacy) for relatively low-cost medicines and advice. But in some cases, participants identified the need to visit a government hospital – or one run by an NGO.

Figure 5: 'Private pharmacy', Kirtipur (Credit: Ammalal Sejuwal, Khila Karki, Vishan Thami)

"People are concerned about their health and are having health check-up in the pharmacy."

Figure 6: 'Pharmacy', Pokhara (Credit: Ramu Thakuri, Shanti Bhandari, Tej Kumari Baral)

"This is the pharmacy at Gandaki Medical College[1] – people are packed together and standing in a queue. Despite coronavirus, there is a big crowd in this place. People come here to get health services, but at the same time the crowd means that they are risking their health."

1. Gandaki Medical College is affiliated with Tribhuvan University. This pharmacy is thus unusual: in most urban areas, it would be more common for people to visit a privately-run pharmacy/medical shop as a first port-of-call for health problems.

Figure 7: 'Queuing at an NGO-run hospital'[2], Kirtipur (Credit: Ammalal Sejuwal, Khila Karki, Vishan Thami)

"We took this photo to show people standing in a queue for health services, although here at least they are socially distanced. Inside the hospital, children are getting vaccinated or receiving treatment. We took this picture because it shows that people are being conscious about their health during the coronavirus pandemic."

2. Kirtipur Hospital is run by phect-NEPAL – a not-for-profit NGO (phectnepal.org).

Figure 8: 'Fever Clinic', Pokhara (Credit: Ramu Thakuri, Shanti Bhandari, Tej Kumari Baral)

"This is a government hospital: Western Regional Hospital. The health services here are cheap, which is helpful for people with a low income. Lots of different services are available in this hospital. As the services here are cheaper [compared to private hospitals], people with low economic status can afford them. Coronavirus has spread all over the country now, and this hospital now provides special health services for coronavirus patients as well."

Figure 9: 'Private kidney hospital', Pokhara (Credit: Ramu Thakuri, Shanti Bhandari, Tej Kumari Baral)

"Different specialized health services are available in Pokhara Metropolitan City. Services for heart, dental, kidney, eyes, nose, throat, ears, skin, etc. are available for those who can afford them. If treatment is not possible in these specialized hospitals, referral can be done and patients can be taken to other bigger hospitals by ambulance."

Figure 10: 'Advertisement for the National Health Insurance scheme', Pokhara (Credit: Ramu Thakuri, Shanti Bhandari, Tej Kumari Baral)

"In order to meet the basic health needs of low-income people, there is now a government health insurance scheme, which is available in Pokhara metropolitan city. A total of 3,500 rupees has to be paid for a family of five. This gives free treatment up to 100,000 rupees for different disease conditions. This has been very helpful to low- income people."

Discussion

What do these photographs, and the explanations provided by our participants, enable us to see? Here we briefly discuss the insights that the project provided on the two issues of interest in the study: how recent migrants understand the new health threats they face in the city; and where they seek care amongst the diverse and complex ecosystem of healthcare providers that are available in both Kirtipur and Pokhara.

Understanding new health threats

It was striking that participants focused on new environmental health threats: in particular, issues around pollution, waste management, and traffic. Certainly, these are amongst the most immediately apparent differences between city and village life, and participants showed an acute awareness of these threats to their health. At the same time, it was noticeable that these are all 'external' health threats. Other urbanization-related health challenges that frequently appear in the literature – for example changing diets, or increased usage of alcohol and tobacco – were not selected by our participants as issues to be documented or discussed. One reason may be that it is far easier to recognize (and thus feel threatened by) environmental rather than personal behavioural factors. Here we see a direct contrast with the oft-

critiqued tendency of government policy to focus on promoting behavioural change in response to health problems (for example, obesity).

As we described above, the fieldwork for this project took place during the COVID pandemic. While this was not photographed by participants as a new health threat in the city (by this point in the pandemic, COVID had been spreading widely in rural areas in Nepal as well as urban ones), they certainly identified its impact on people's behaviour and the risks they were taking when accessing health services (Figures 6 and 7), as well as the development of additional temporary health facilities (the Fever Clinic in Pokhara in Figure 8). Here we found participants intuitively linking our two research questions, looking not only at health threats, but about how those threats affected the use of, and availability of, health services in their local area.

Navigating the health system

Turning to the issue of navigating the local health system, the photographs and discussions of them revealed that participants had a sophisticated knowledge of their local health service ecosystem, understood as the range of providers available for different forms of health need in their locality. As is perhaps to be expected, there was variability in the depth of knowledge, but participants were all able to talk knowledgeably about a wide range of service providers in their respective localities including government-run facilities (Figure 8), private providers (Figures 5, 6 and 9), and those run by NGOs (Figure 7) or other bodies (Figure 6).

In both Kirtipur (Figure 5) and Pokhara (Figure 6), the local pharmacy was generally identified as the first place to visit for most non-emergency health needs – although participants also knew where more specialized treatment was available where required and were able to make informed decisions about the appropriate providers of care for a range of different health problems.

These perspectives of rural-urban migrants challenge how policymakers in Nepal (and elsewhere) generally think about the health system. The patchwork of healthcare options photographed and discussed by our participants did not match the neat organograms of government-run services through which health policymakers generally think and act. Although it is clear that they are widely used across the population, health policymakers and planners in Nepal rarely, for example, think of pharmacies as integral parts of the country's health system. Understanding how individuals experience the diverse urban healthcare ecosystem is necessary in order to be able to properly tailor service delivery to meet the needs of the newly urbanized.

Conclusion

Working alongside recently urbanized people themselves to understand issues of healthcare access and utilization can provide important insights for informing policy and planning in Nepal, and potentially elsewhere. The experiences of individual patients/users are often overlooked in health systems planning. But this is particularly true of those who have recently migrated from rural to urban areas, who are rarely, if ever, seen as a distinct population group in their own right, with their own needs and challenges. The types of participatory methods utilized in this study represent one way of more fully understanding the experiences and perceptions of recent migrants.

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