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O P Akinwale (Director of Research), J O Oyefara (Lecturer), P E Adejoh (Lecturer), A A Adeneye (Lecturer), A K Adeneye (Research Fellow), Z A Musa (Research Fellow), K S Oyedeji (Research Fellow) & M A Sulyman (Research Fellow)

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## The benefits of using a community-engaged research approach to promote a healthy lifestyle in three Nigerian urban slums

OP Akinwale, JO Oyefara, PE Adejoh, AA Adeneye, AK Adeneye, ZA Musa, KS Oyedeji, MA Sulyman

Olaoluwa Akinwale,¹ PhD, Director of Research; John Oyefara,² PhD, Lecturer; Pius Adejoh,² MSc, Lecturer
Adejuwon Adeneye,³ PhD, Lecturer; Adeniyi Adeneye,¹ MSc, Research Fellow; Zaidat Musa ZA,¹ MSc, Research Fellow
Kolawole Oyedeji,¹ PhD, Research Fellow; Medinat Sulyman,¹ PhD, Research Fellow
¹Nigerian Institute of Medical Research, Yaba, Nigeria
²Faculty of Social Sciences, University of Lagos, Akoka, Yaba, Nigeria
³Faculty of Basic Medical Sciences, Lagos State University College of Medicine, Ikeja, Nigeria
E-mail: pheabian@yahoo.co.uk
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Slums are a wide range of low-income settlements with poor living conditions. The quality of the dwellings varies from simple shacks to permanent structures, while access to water, electricity, sanitation and other basic services and infrastructure tends to be limited. Noncommunicable diseases (NCDs) exist in slums as the inhabitants adopt an urbanised lifestyle which places them at high risk. Lack of knowledge about the complications of NCDs and how to control them contributes to a large percentage of undetected and untreated cases. Therefore, our recently concluded study aimed to reduce the prevalence of NCDs by promoting a healthy lifestyle in three Nigerian urban slums using a community-engaged research approach. We decided to adopt this approach since community-engaged research takes place in real-world conditions, thus increasing the applicability of findings to practical applications that improve human health. Literature has shown that meaningful community involvement can improve the research process itself, as well as the ultimate findings. Research questions about health issues that concern the community are developed, and people are more likely to give their support when they understand the purpose of the research, and how the results may positively affect them. Thus, this helps when recruiting participants. In addition, research questions help to identify the health risks that are revealed through people's participation, and helps with the development of appropriate ways to protect participants in this regard. Research questions also assist with improving study and instrument design by producing user-friendly, culturally sensitive, accurate and valid practices and measures. Furthermore, community involvement in analysis and interpretation can provide an important explanation of the results, and provide ideas that the researchers had not even considered. A community-engaged research approach provides an opportunity for greater trust and respect to be built between academic researchers and communities. This can lead to future research collaborations, as well as an improvement in community health.

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#### Introduction

The United Nations Human Settlements Programme provided a comprehensive global description of urban slum communities, and attempted to identify different approaches to address this problem to achieve the United Nations Millennium Development Goals. Apart from standard social indices, such as life expectancy at birth, under-five mortality rates and access to improved water sources and sanitation, the report does not address the disease spectrum or burden in these communities.

Disease burden or mortality information on urban slum dwellers in many countries is largely based on clinic, hospital or national mortality registry data. This type of information is not sufficient to plan healthcare expenditure, and grossly underestimates or misdirects healthcare resource allocation needs. Also, the formal health sector inevitably deals with the severe and end-stage complications of these diseases at a substantially greater cost than that used to manage non-slum community populations.<sup>2</sup> Noncommunicable diseases (NCDs), such as hypertension, diabetes, cardiovascular disease, lung disease, chronic respiratory disease, cancer, mental health problems, and asthma and allergy, are rapidly emerging as a public health challenge to urban slum populations.<sup>3-5</sup> Lifestyle risk factors, like tobacco, alcohol and drug abuse, an unhealthy diet, indoor pollution, overweight or obesity and physical inactivity, affect the health of individuals, and are common contributors to many emerging NCDs.<sup>6</sup> Prevention and modification of unhealthy lifestyle factors have a positive effect on the reduction in NCDs and mortality.<sup>5</sup>

Our recently concluded study was aimed at reducing the prevalence of NCDs by promoting healthy lifestyles in Ajegunle, Ijora Oloye and Makoko, three of the most inhabited slums located within Lagos metropolis, south-west Nigeria, using a community-engaged research approach. This approach was adopted as it is becoming increasingly clear that community input and participation in research is crucial in order to generate results that are likely to be useful and lead to real practice and policy change. In addition, an academic-community research partnership means that what is discovered is more likely to be applied directly to improve the health and lives of inhabitants in real-world circumstances.

#### Method

Prior to commencement of the study, ethical clearance was obtained from the Institutional Review Board of the Nigerian Institute of Medical Research. Informed consent of key stakeholders and participants in the three communities was received. Permission to carry out the project in the selected communities was obtained from the three local government area authorities who oversee the study communities.

Key methodologies for baseline, intervention and end-line data collection included a cross-sectional survey using a semi-structured questionnaire, an in-depth interview and focus group discussions. Simple, but standard, diagnostic tests were performed to assess the correlates of some NCDs, such as body mass index and random blood glucose. The study was multicentric and involved eight researchers and fifty-four research assistants with diverse disciplines from three higher institutions in Nigeria, i.e. the Nigerian Institute of Medical Research, the University of Lagos and Lagos State University College of Medicine. The composition of research team personnel from diverse professional backgrounds contributed immensely to the successful execution of the research project. The group also had access to highly qualified and experienced graduate students for use as research assistants which considerably enhanced the credibility of the generated data. Community peer health educators and research assistants were given incentives in the course of the project, since good training and incentives are tantamount to good performance in the field. In return, they demonstrated interest and willingness to achieve good results. Before the field activities took place, the research assistants received training on various research tools to be used. The training was intended to enhance their understanding of the research protocols and their competence in administering the various research tools. In addition, 18 community members, six drawn from each of the three slums, were trained as community peer health educators, and actively participated in the study.

#### **Results and discussion**

The community-engaged research approach adopted in this study fostered a strong partnership between personnel of diverse professional backgrounds from the three academic institutions, members of the study communities and their

respective local government health authorities. In turn, the partnership broadened and strengthened the research potential of the research team. It also ensured effective use of individual talents and the cross-fertilisation of ideas, as well as transfer of knowledge and skills, including social skills needed to work as a team. The health authorities supervised the recruitment of members of the communities who were then trained and engaged as community peer health educators.

Training and engaging members of the community as peer health educators led to the development of an academic and community partnership. Their involvement in the project gave inhabitants a sense of ownership and commitment, and it helped the research team to gain acceptance in the communities. The involvement of the community peer health educators had a great influence on the response of the community members. The peer health educators sensitised and mobilised people prior to the post-intervention phase. This greatly accounted for the success of the study. In turn, they provided guidance to the team on community members' recruitment and retention strategies, which helped the team to enjoy the full cooperation of community members.

Furthermore, community peer health educators helped to improve the design of the monitoring and evaluation tools used in the intervention phase of the study, and through their input, useful ideas not previously considered by the researchers, were provided. Their participation as peer health educators within their own community led to many community members giving up drinking alcohol and smoking, and adopting a healthier lifestyle. Their involvement in the study also boosted their self-esteem and acceptability in their respective communities.

Through this collaborative research, the team was able to determine the prevalence of hypertension, diabetes and obesity in the study communities. The team was also able to assess the healthcare seeking behavior of the residents. In turn, these research findings were shared with the respective health authorities for further interventions so as to improve the health and well-being of the people.

#### **Conclusion**

Greater trust and respect was established between the academic institutions and the community. This approach resulted in knowledge sharing among stakeholders, and helped to address key public health and behavioural issues such as smoking, excessive alcohol intake, lack of physical exercise and unhealthy eating habits in the three urban slums, while the method enabled the team to produce results that could be directly translated to improve the health of the people. The inhabitants in these communities expected the research team to go beyond data collection and report writing, but also to return and present the findings of the study to them. In addition to the results being provided, community members asked for intervention with regard to some of the identified



health risks and common NCDs in the communities. They look forward to hosting similar studies in the near future.

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#### **Conflict of interest**

The authors declare no conflict of interest.

#### References

- United Nations Human Settlement Programme (UN-HABITAT). The challenge of slums: global report on human settlements. London: Earthscan Publications; 2003.
- Lee WR, Albert IK, Alon U, Mitermayer GR. Slum health: diseases of neglected populations. BMC Int Health Hum Rights. 2007;7:2.
- 3. World Health Organization. Reducing risks, promoting healthy life. Geneva: WHO; 2002.
- Boutayeb A, Boutayeb S. The burden of non communicable diseases in developing countries. Int J Equity in Health. 2005;4(1):2.
- Khuwaja AK, Qureshi R, Fatmi Z. Non-communicable diseases and injuries: action needed in South Asia too. PLoS Med. 2007;4(1):e38.
- Rguibi M, Belahsen R. Overweight and obesity among urban Sahraoui women of south Morocco. Ethn Dis. 2004;14(4):542-547.