Challenges Faced by the Urban Black South Africans in the Prevention of Non-Communicable Diseases

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INTRODUCTION

The increase in the prevalence of non-communicable diseases (NCDs) is a global health problem. In 2002, WHO reported that 60% of all deaths and 47% of the global burden of diseases were attributed to NCDs (WHO, 2002). In developing countries, a large percent of deaths are attributed to NCDs, where those who are affected are younger compared to those living in developed countries. Estimates show that by 2020 a third of the global burden of diseases will be attributable to NCDs (WHO, 1997).

The impact of urbanisation in developing countries have been well documented. This includes long-term changes in the patterns of health and disease known as epidemiological transition. This occurs over decades as the population improves their socio-economic standard of living. Omran (1971) identified a set of events through which health transition occurs. These include a period where infectious diseases are dominant, followed by a period where chronic diseases are dominant. He noted that when communities adopt unhealthy lifestyle, which include smoking, consuming a diet high in fat, and decreasing physical activity over time, they experience an increasing level of obesity, diabetes, and hypertension. Omran further notes that improvement in the socio-economic conditions of the communities lead to a decline in the number of deaths attributable to infectious diseases, an increase in life expectancy, and a shift in mortality towards chronic diseases. The factors that contribute to changes in lifestyles among the urbanised populations are not clearly understood. Urbanisation in this context refers to the movement of people from the rural to urban settings.

HISTORICAL EVENTS THAT LEAD TO INCREASED RISK FOR THE DEVELOPMENT OF NCDs AMONG THE URBAN TOWNSHIP DWELLERS IN SOUTH AFRICA

Historically, the black population was removed by force from the urban areas, which were declared as "white", to the so-called "Homelands" by the Apartheid government Relevance (Marais, 1998). Inequities based on race and geographical allocations were thereby created. According to the native Land Act of 1913 the black population (the majority of South Africans, 77%) was only allowed to occupy 13% of the available land. The strict influx control ensured that many black South Africans lived far from most urban centres.

Many blacks in the rural areas were deprived from basic services, such as water and electricity. Lack of employment opportunities in the rural areas, caused most of the men to migrate to the city to seek job opportunities, while their wives remained at home to raise children.

In 1994, Apartheid laws were abolished and this meant that blacks were liberated to move to urban areas. The rapid influx was aggravated by the perceptions that there are better work opportunities and easier access to basic services such as education and health in urban areas.

Moving to the city does not always seem to be a better option for previously disadvantaged population groups. They often arrive in an unwelcoming environment and do not feel comfortable with the city life, as relatives and extended families remain in their rural homes. This result in feeling isolated. Lack of living space results in people resorting to building informal houses with the hope of moving to a better home someday (de Swart et al., 2004). They are often faced with poor water supply and sanitation facilities (SOPH, 2004). Their lifestyle changes towards the adoption of a westernised culture, while retaining some of the traits that were internalised during socialisation (Puoane et al., 2006). This paper describes the circumstances that increase the risk for non-communicable diseases amongst urban poor South African population groups.

Khayelitsha Study Illustrate the Challenges Faced by Township Residents of South Africa

Cape Town is a city on the southwest tip of South Africa with a population of approximately 3.3 million. There are vast disparities between the wealthy areas, where the majority of residents are white and wealthy blacks, who live in first world conditions, and the poorest areas, where residents live in conditions found in developing countries. The apartheid history of the country has led to the poorer communities being located in discrete geographical areas on the outer limits of the city, known as the Cape Flats. The city itself is divided into 11 health districts; Khayelitsha and Nyanga are the two in which most of the African black population reside. The majority of the population residing in Khayelitsha have moved from the former homelands that were created during apartheid.

The socio-economic indicators shown in table 1 are worse for Khayelitsha and Nyanga than for any of the other districts.

Table 1: Socio-economic data for urban Townships in Cape Town (2002)

Indicators	Nyanga	Khayelitsha	Total Cape Town
% Informal dwelling	64	80	20
% No electricity	54	33	13
% Unemployed	50	47	27
% Household below poverty	57	54	25

Source: SOPH (2004)

Community Efforts for Primary Prevention of NCDs

In 2000 a community-based program on the primary prevention of NCDs was piloted in Khayelitsha. The main focus was on diet and physical activity. The project targeted Community Health Workers (CHWs) who were employed by a Non Governmental Organisation and residents of Khayelitsha. CHWs were targeted to serve as change agents because of their instrumental role in the community.

An action research using a participatory approach was used to plan and develop community interventions. The process was undertaken in four stages: The first stage involved assessment of the CHWs risk factors for NCDs (Puoane et al., 2005; Sengwana and Puoane, 2004; Chopra and Puoane, 2003). The second stage involved developing and implementing a training program for primary prevention of noncommunicable diseases among CHWs. Stage three involved a situational assessment in the township for available resources in the community for promoting healthy lifestyles (Puoane et

al., 2006). The fourth stage involved implementing community interventions with CHWs (Puoane et al., 2006).

Assessment during the process of developing interventions identified challenges faced by black urban population in preventing NCDs. These include nutrition related problems, environmental, socio-economic, cultural and educational factors.

Eating Patterns: Data on eating patterns revealed consumption of food rich in fat including full cream milk, sausages, red meat and offal.

In-depth interviews revealed very limited knowledge about nutrition, leading people to make unhealthy choices about food including method of preparation. These narratives illustrated this

"Chicken skin is very tasty because it has fat. It makes you satisfied. We cannot throw the skin away. We even buy (skin and fat)"

"We love meat with fat. Fat drained from meat is also used for cooking"

"People who boil food are not civilized. Fried food is attractive and tasty like "chicken licken". If your neighbours boil food people say they are still backward because the food does not taste nor look attractive"

"Its quick to fry food than to boil it. Fried meat is tastier than boiled meat (Chopra and Puoane, 2003)

Environmental Influences: Shop owners and street vendor stalls in the township only sell food items that are on demand. Observations from local shops found that only full cream milk was avai-lable on the shelves. Chicken skin, which is consi-dered not good in the city (where the affluent resides), is sold in some shops in the township. (Puoane, 2004).

Street vendor stalls sell fatty meat and sausages. The type of meat they sell is easily accessible at a cheaper price to the majority of locals. The street vendor owners had regular customers who often bought meat on credit.

In a community meeting residents were concerned about discouraging street vendor owners from selling fatty meat, stating that it is the only way of earning a living. They felt that the best way of discouraging them was to increase the knowledge of locals about the health implications of consuming fatty meat. They assumed that once people are empowered about good nutrition, they would stop buying unhealthy meat from the vendors, who will realize that

their customers are no longer buying from them, therefore change to healthy food.

Consumption of large portion sizes was a common practise in this population, and was thought to be a way of gaining respect from neighbours who disrespect people who are not self-sufficient (Puoane et al., 2005).

Family meals were reported to be unstructured, and people ate whenever food was available. When food was scarce, poor people often ate whenever food was available. This is because they were uncertain about where next meal was going to come from. What is strange is that even with plenty food, individuals continued to have unstructured meals and eat whenever food was available (Puoane et al., 2005).

Socio-cultural Factors

Community norms and values also had a contribution to some of unhealthy eating. For example, men ate meat on daily basis; lean meat and black tea is often served during mourning periods. Lean meat is also associated with stinginess while fatty one is a sign of generosity. It is a common practice to consume fatty meat during celebrations.

Some of the difficulties faced by the black population in maintaining the ideal body weight is the fact that being overweight is desirable, as it is a sign of affluence; those who have migrated to the city are often envied and complemented when they visit rural areas. In addition, the belief that thinness is associated with HIV/AIDS makes it difficult for the majority of the population to maintain normal body weight, especially women.

As part of the intervention, fun walks were organised within the township to increase community participation in physical activity. In spite of the posted invitations and publicity about the walk, on the day of the walk, community residents became spectators instead of joining the walk. The reason for not participating was I used to walk a lot to fetch water and gather wood; I do not see the need of walking just for nothing".

Historically, walking was used as a coping mechanism for performing agrarian-related activities, such as tending to animals, fetching water, and gathering wood. On arriving to the city people opt for easy transport rather than walking. In addition to beliefs related to fear of losing weight, poor environmental conditions such as a high crime rate and overcrowding contributes to minimal physical activity. A decrease in physical activity levels result in an increase in the prevalence of overweight and obesity (Puoane et al., 2005).

Perceptions that loss of weight meant that a person was infected with HIV; as well as lack of green areas for relaxation and exercise facilities further prevented this population from engaging in physical activity.

The Cost of Unhealthy Lifestyle in South Africa

Unhealthy lifestyles among urban township residents have exposed this population to several non-communicable conditions. These include obesity, hypertension, and diabetes mellitus.

Obesity: Obesity, which was previously thought of as being a disease of affluent, is now affecting the poor. In South Africa, the overall prevalence of overweight (BMI > 25) and obesity (BMI>30) is high. The first National Demographic Survey (DHS) of 1998 reported a prevalence of 29% and 56% obesity among men and women respectively. The highest prevalence of obesity (58.5%) was reported among urban African women(Puoane, 2002). Data collected during 2001 among community health workers who are residents of Khayelitsha found that a large percent (97%) was overweight and obese (Puoane et al., 2005). Of concern is that although theoretically they were aware of health consequences of obesity, they never perceived themselves at risk for NCDs

Hypertension: Hypertension defined as having a current BP \geq 140/90 mmHg or having a history of hypertension (Steyn et al., 2001). Hypertension is a common condition among poor South Africans. It often co-exists with other risk factors for non-communicable diseases including obesity and diabetes. Some dietary factors that are related to hypertension include increased sodium intake, and decreased fruits and vegetables. Studies show that poor blacks utilise a lot of salt during cooking as well as to cooked food in order to give taste (Seedat, 1996).

Although hypertension is a common condition among poor South Africans, a large percent is undiagnosed probably due to lack of routine physical check-up, people often seek medical aid when they feel the pain (Mbombo, 1996)

A relationship between people who have

migrated from rural villages to the city and blood pressure have been reported by Poulter et al, 1990, who found that the population that have migrated had higher BMI, higher pulse rates and higher urinary potassium ratio than the rural counterparts. Recent estimates of hypertension among South Africans have been reported in DHS of 1998. The overall hypertension prevalence rate among the black Africans was 59% (Steyn et al., 2001).

Diabetes Mellitus: Few epidemiological studies related to diabetes have been conducted since 1998. Data from a national representative sample of adults of 15 years and over undertaken in 1998 found a self-reported diabetes prevalence of diabetes of 2.4% and 3.7% among males and females respectively. Although the prevalence was higher in urban men and women compared to nonurban counterparts, it has not been established if diabetes in South Africa is on the increase especially in the rapidly urbanised population. All the abovementioned challenges indicate that rapid urbanisation combined with globalisation leads to a shift in health outcomes, with an increasing prevalence of NCDs among the South African population, particularly in those who were previously disadvantaged.

DISCUSSIONS

This research provided important information regarding the challenges faced by the urbanised poor population in South Africa. Although Khayelitsha was used to illustrate these challenges, the situation is similar to other urban townships of in South Africa.

This paper shows that the emerging epidemic of non-communicable diseases among the previously disadvantaged population groups is partly shaped by the living conditions in which many black South Africans were subjected to during the Apartheid era. Moving to the city for what is thought to be better opportunities does not make life easier or any better. The longer people stay in the city, the more they find themselves having to deal with new priorities. They also become victims of cash loan companies that exploit no one else but the poor low-income population groups (de Swart et al., 2005). This situation results in food being sacrificed or having to make adjustments by settling for poor quality and cheap foods (Puoane et al., 2005).

As the consumption of traditional food is

often associated with poverty, as soon as people move to the city, they change their diet towards the adoption of a typical westernised diet, which has a high in fat content, low in complex carbohydrate and fibre compared to traditional diet (Bourne, 2002).

Financial constraints have shifted people's concerns from healthy eating to consuming what is available in order to survive. Cheap fatty meat becomes an option because they can feed their families at a lower cost.

Commercial messages used to promote certain products, including food rich in fat and sugar including carbonated drinks portrays happiness as associated with consumption of such foods, instead of beans, lentils and corn, which are healthier options. This contradicts healthy eating advice given by health personnel. When people have extra money, they tend to go for food that will make them happy.

Sometimes people felt that due to geographical allocation, they had been deprived of consuming food that is thought to be associated with status, including fast foods, sausages, eggs, and meat. Once they move to the city, they abandon their traditional food and indulge in foods that they were previously deprived of.

Previous studies have shown that the degree of urbanisation (expressed as the percentage of a person's life spent in the city) is related to the degree that the risk factors for and precursors of NCDs are emerging in the black population. For example, Bourne (1994), Steyn et al. (1994), Steyn et al. (1996) found that in the black population, the degree of urbanisation is directly related to consumption of a typical westernised diet, smoking cigarettes at an early age in black women, and the development of diabetes and hypertension.

CONCLUSION

This experience shows us that all the efforts aimed at addressing the problems of increasing NCDs in South Africa are hardly reaching the urbanised population living in informal settlements. Informal settlements have limited access to electricity, thus they miss health messages, which are disseminated through television set. Therefore, there is a need for special programmes aimed at helping those who have just moved from rural areas to adjust to life in the city should be developed and implemented. These programmes

should be targeted at disadvantaged people to prevent isolation, stress, and adopting unhealthy lifestyles. Such programmes should help with seeking accommodation, employment opportunities, access to health services, wise budgeting, choice of healthy foods, and ways of increasing physical activity by incorporating cultural appropriate activities such as African dance.

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REFERENCES

- Chopra, M. and T. Puoane. 2003. "Prevention of diabetes through Obegenic World." *Diabetes Voice*, 48 Special Issue: 24-26.
- Bourne, L.T., E. V. Lambert, E. Steyn. 2002. "Where does the black population of South Africa stand on the nutrition transition?" *Public Health Nutrition*, 5: 157-162.
- Bourne, L.T. 1996. Dietary Intake in an Urban African Population In South Africa-With Special Reference to the Nutrition Transition. Thesis for Doctoral Philosophy, University of Cape Town, South Africa
- Bradshaw, D., P. Groenewald, R. Laubscher, N. Nannan, B. Nojilana, R. Norman, D. Pieterse, M. Schneider, D. Bourne, I. Timæus, R. Dorrington, L. Johnson. 2003. "Initial burden of disease estimates for South Africa 2000." South African Medical Journal, 93(9): 682-688.
- de Swardt, C., T. Puoane, M. Chopra, and A. du Toit. 2005. Urban poverty in Cape Town. Environment and Urbanization. Chronic Poverty No. 17(2): 101-111. Department of Health. Strategies for the National Health System 2004-2009.
- de Swart, C., T. Puoane, and L. Tsolekile. 2004. Livelihood, Poverty and Food Security amongst Cape Town African Poor. Paper presented at the Public Health Association of South Africa conference. Challenging health inequalities: Forging progressive partnership for public Health. Durban, South Africa. 6-8 June 2004.
- Groenewald, P., D. Bradshaw, B. Nojilana, D. Bourne, J. Nixon, H. Mohamed, J. Daniels. 2001. Cape Town Mortality, Part III, Cause of death profiles for each sub-district. Cape Town: City of Cape Town, South African Medical research Council, University of

- Cape Town, 2003. www.mrc.ac.za/bod/bod.htm (accessed on 14 July 2005).
- Marais, H. 1998. South Africa: Limits to Change The Political Economy of Tansformation. Cape Town: University of Cape Town Press.
- Mbombo, O. 1996. "Practicing Medicine across Cultures: Conception of Health, Communication and Consulting Practice", in ME Steyn and KB Motshabi (ed.), Cultural Synergy in South Africa, Weaving Strands of Africa and Europe, Randburg: Knowledge and Resources.
- Omran, A. 1971. "The epidemiological transition a theory of the epidemiology of population change." Milbank Memorial Fund Quarterly, 49(4): 509-538.
- Poulter, N., K. T. Khaw, B. E. Hopwood, M. Mungambi, W. S. Peart, G. Rose, et al., 1990. "The Kenyan Luo migration study: observations on the limitation of the rise in blood pressure." *British Medical Journal*, 300: 967-972
- Puoane, T., K. Steyn, D. Bradshaw, R. Laubscher, J. Fourie, V. Lambert, and N. Mbananga. 2002. "Obesity in South Africa: The South African demographic and health survey." *Obesity Research*, 10: 1038-1048.
- Puoane, T. 2004. "Transforming the health services to respond to the emerging epidemic of NCDs." Paper presented at the Public Health Association of South Africa Conference. Challenging health inequalities: Forging progressive partnership for public Health. Durban. 6-8 June 2004
- Puoane, T. R., J. M. Fourie, M. Shapiro, L. Rosling, N. Tshaka, and A. Oelofse. 2005. "Big is Beautiful' an exploration with urban black women in a South African township." South African Journal of Clinical Nutrition, 18(1): 6-15.
- Puoane, T and G. Hughes. 2005. "Impact of the HIV/AIDS pandemic on non-Communicable disease prevention." South African Medical Journal, 95(4): 228-230.
- Puoane, T., P. Matwa, H. Bradley, and G. Hughes. 2006. "Socio-cultural factors influencing food consumption patterns in the black population groups residing in black townships of South Africa." *Human Ecology* Special Issue No., 14: 91- 96.
- Seedat, Y.K. 1996. "Is the pathogenesis of hypertension different in black patients? "Journal of Human Hypertension, 3(Suppl): S35-S37.Sengwana, M.J. and T. Puoane. 2004. "Knowledge,
- Sengwana, M.J. and T. Puoane. 2004. "Knowledge, Beliefs and Attitudes of Community Health Workers about Hypertension in the Cape Peninsula, South Africa." *Curationis*, 27(1): 65-71.
- Statistics South Africa 1998. (1996). The people of South Africa. Population Census, 1996, Census in brief. Report No 1:03-01-11.
- Steyn, K., T. A. Gaziano, D. Bradshaw, R. Laubscher, and J. Fourie. 2001. "Hypertension is South African adults results from the Demographic and Health Survey, 1998." *Journal of Hypertension*, 19: 1717-1725
- SOPH., 2004. Equity in Health: Cape Town. (2002). Cape Town: SOPH, UWC.
- World Health Report, 1997. Conquering Suffering, Enriching Humanity, and Geneva: World Health Organization.
- World Health Report, 2002. Reducing Risks, Promoting Healthy Life, and Geneva: World Health Organization.

KEYWORDS Urban; South Africans; non communicable disease

ABSTRACT This paper was conducted to describe some of the circumstances that increases the risk factors for non-communicable diseases amongst the previously disadvantaged South African population. The work presented here is based on an action research in an urban black township of Cape Town. The goal was to develop a Non-Communicable Disease model, which can be used to benefit an urban township community. Using a participatory process data was collected during each stage of the development and implenting interventions. Interviews, observations and situational assessment of resources available for promoting healthy lifestyle in the township were used to collect data. Although urbanisation seems to be a driving force in nutrition transition, there are underlying factors that influence lifestyle changes. These includes the environment in which people find themselves. The city provides variety of cheap unhealthy food at a lower price. Due to poverty and lack of knowledge, healthy foods become of less important. People tend to indulge in food rich in fat and sugars due to the belief that they have missed opportunities of enjoying these foods due to deprivation. This has lead to the increase in the prevalence of NCDs among poor South Africans. In conclusion, this work provided important information regarding the challenges faced by the urbanised poor population in South Africa. Although Khayelitsha was used to illustrate these challenges, the situation is similar to other urban townships of in South Africa.

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