

Zieliński Ewa, Sas Katarzyna, Zukow Walery. Difference of pro-health behaviors among the inhabitants of Ghana. Journal of Education, Health and Sport. 2018;8(11):337-345. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1492121>  
<http://ojs.ukw.edu.pl/index.php/ohs/article/view/6307>  
<https://pbn.nauka.gov.pl/sedno-webapp/works/887776>

The journal has had 7 points in Ministry of Science and Higher Education parametric evaluation. Part B item 1223 (26/01/2017).  
1223 Journal of Education, Health and Sport eISSN 2391-8306 7

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The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 30.10.2018. Revised: 20.11.2018. Accepted: 20.11.2018.

## **Difference of pro-health behaviors among the inhabitants of Ghana**

### **Odmienność zachowań prozdrowotnych wśród mieszkańców Ghany**

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**Key words: pro-health behaviors among, disease, Ghana**

**Słowa kluczowe: zachowania prozdrowotne, choroby, Ghana**

## **Abstract**

The diversity of behaviors, including pro-health ones, in developing countries is a major health, social and economic problem. Especially it affects the developing countries of Africa. In every culture, health is perceived differently. Inhabitants of different continents use different patterns of behavior, values, norms and cultural habits. The approach to health in individual cultures and social groups is the result of separate views and aspirations and from belief systems.

Health indicators in Ghana are systematically improving. For example, the estimated life expectancy for people borned in 2015 was 61 years for men and 64 years for women. These indicators have been systematically growing for several dozen years thanks to the reduction of mortality caused by the medical development, improvement of hygienic and sanitary conditions, increase in the living standard, improvement of nutritional status and common protective vaccinations used in order to reduce the epidemic. Optimistic is the fact that life expectancy in health is 54 years. This is one of the best results in the sub-Saharan Africa region [1].

Despite a significant improvement in the majority of health indicators, Ghana continues to face numerous prevention and health care problems. During the research projects carried out in Ghana, numerous observations have been made in this area. For example, the state of knowledge about pro-health behaviors among the residents of Ghana has been assessed. Even the preliminary observation before the preparation of the publication indicated the problem of inadequate pro-health behaviors preferred among the inhabitants of Ghana.

## **Introduction**

In 2017, during the Paramedics for Africa and Obruni comes back to Africa projects, the problem of different health behaviors and lack of hygiene was noticed, especially in the poorest regions of Ghana. According to the World Bank, 89% of Ghana's population have access to the running water [2], which in Ghana does not mean having a well or working tap at home, but only the access to water in the area. However the problem is that this access is not permanent. Due to the hot climate and poor quality of sanitary infrastructure, interruptions in water supply are frequent and long-lasting, therefore, almost every household or institution has regularly replenished tanks with a few days of water supply. People who do not have such tanks buy water from tanks placed in the central parts of the district. Two buckets of water cost the equivalent of a meal. However, the quality of stored water and hygiene is questioned, and due to several-day breaks in water supply, water must be used sparingly. Access to the sanitary and hygienic infrastructure has only 14.9% of inhabitants. In cities, this indicator is 16%, and in rural areas only 7.4% [2].

Ghana does not have a public restroom system. Only in a few locations, you can find public showers. Physiological needs are dealt with in the countryside wherever, and in the city, usually in uncovered drainage ditches, without the possibility of hand washing. Ghanaians do not have a habit of washing their hands after dealing with physiological needs, which is why hand hygiene is not observed even in conditions of access to water. In this region, customary the left hand is used for intimate hygiene and the right hand for eating meals. However, it does not protect in any way against the spread of pathogenic microorganisms. The hygiene of food preparation is also neglected. The main problems are cultural conditions and lack of knowledge about the etiology of diseases. This is the reason why hand hygiene before eating and preparing meals is skipped. Despite the progress of civilization, the habit of eating without using the cutlery is still actual. In Ghana, diarrheal diseases are very common. They cause 3.6% of deaths (the seventh cause of death in Ghana) [1]. This is one of the biggest epidemiological problems in this country. The level of illiteracy in Ghana reaches 28.5%, however from own observations it is believed that in poorer regions it is much higher [3].

The official language is English, however, part of the society communicates only in tribal languages (mainly Twi, Ga and Ewe). It was noted that during the education of the desired pro-health behaviors, the language and form of information should be adapted to the uneducated part of Ghanaian society. Observing preventive programs implemented in Ghana, it was found that local educators of a healthy lifestyle, have the confidence of local people. Those educators communicate with the local language and know the local culture and customs. Therefore, as part of increasing the awareness and hygiene level of the residents of Ghana, it was decided to train local outreach workers and teachers to conduct educational campaigns on hygiene. The training of local educators seems to guarantee the dissemination of knowledge not only during the implementation of educational and preventive programs, but long after the completion of projects. In 2017 during the implementation of the Paramedics for Africa and Obruvi comes back to Africa programs in Ghana, an attempt to change the existing habits related to washing hands among the local community turned out to be a big challenge. Ghanaians, the need to wash their hands, identify with the presence of visible stains. Therefore, for example, hand washing before eating is not considered necessary, however hand washing after eating food with hands is considered essential [4]. Lack of awareness about the existence of pathogenic microorganisms causes that the inhabitants of Ghana suffer from many diseases resulting from the lack of compliance with the basic rules of hygiene. It is obvious that hand hygiene is the main preventive factor for the spreading of diarrheal diseases in Ghana.

During the implementation of the preventive program, hygiene errors were corrected and the hand hygiene was indicated in which situations. It was noticed that making recipients aware of the role of invisible microorganisms appears to be a challenge in this group.



Fot. 1. Own photo: Teaching hand hygiene In schools

Other implementers of preventive programs also bowed to the statement that teaching Ghanaians to wash their hands is one of the elements that could have a positive impact on everyday hygiene habits and prevent the spread of many diseases [4]. The components of the Paramedics for Africa and Obruni comes back to Africa projects were to train local educators (those speaking English and tribal languages, mainly Twi, Ga and Ewe) in the field of etiology and prevention of infectious diseases, with particular emphasis on "dirty hands diseases". The educators were also taught the rules of hand hygiene from scratch, that is: the proper technique of hand washing recommended by the WHO and the rules of hygiene during the preparation and consumption of meals. 48 teachers and outreach team members working in the Greater Accra region were included in the training. Due to the low participation of children in education, trained people were supposed to include an educational program, not only for school children but also for those who do not go to school (drop outs). It should be emphasized that original project "Against Ebola" carried out in the area of Mamprobi, Pambros and Dansoman caused huge interest and a significant reduction in diseases of dirty hands, especially cholera [5]. Based on the example of this project, it was decided to provide training in public and easily accessible places (f.eg. on street corners, market squares), where children and adults were taught using hand washing techniques demonstrations and short talks about hygiene.



Fot. 2. Own photo: hand hygiene outreach programme

In Ghana, 28% of the population has no access to electricity, and for the others, this access is not permanent. The current is regularly disconnected (dumsor) [6]. This makes it impossible to even store food at low temperatures. During the stay in Ghana, it was also noticed that the selection of appropriate methods for storing and preserving food for specific products could contribute to reducing the incidence of food poisoning. The inability to store food at low temperatures and the diversity of nutritional behaviors caused the appearance of roadside food trade. Nearly on every crossroad there is fast food offering fried yams, grilled plantains, fufu and increasingly popular Chinese soups.



Fot. 3. Own photo: Street food.

The drinking water available for sale is preserved with naphthalene and chlorine. Cooking on the street, along unpaved roads, causes contamination of food with dust. The lack of access to the hygienic and sanitary infrastructure of people preparing meals increases the risk of infecting food with pathogenic microorganisms. The sanitary and epidemiological conditions in Ghana deviate significantly from western standards. During the project implementation, a problem of the lack of adequate health behaviors in some outpatient clinics, clinics and hospitals was also noticed. Due to the hot and humid climate, most buildings, also for public benefit, are built without glass in the windows, only with mosquito nets inside the hole. It affects the level of brightness and air circulation in the room, but in the operating rooms significantly increases the risk of infecting the patient. For obvious reasons during the implementation of the original program, no attempt was made to change the infrastructure of hospitals in Ghana. Another disturbing fact noted during the project was the use of surgical instruments and reusable medical equipment in the clinic. This is caused not only by the lack of availability of disposable medical equipment and high purchase costs but also by the convictions of local medical personnel that the sterilization of medical equipment in hot water destroys all microbes present on the equipment [7-10].

It should be added that autoclaves, although they are available in larger hospitals and clinics, are rarely used. Also the hygiene conditions prevailing in the clinics are not satisfactory. The staff do not wash hands "between patients", the equipment is rarely

disinfected or sterilized, and the delivery and operating rooms are dusty. This condition undoubtedly favors the development of many diseases that Ghana is struggling with. It is worrying that among the medically educated people there are noticeable negative behaviors regarding hygiene principles. Due to this fact, it seems necessary to increase not only the number of preventive programs aimed at spreading knowledge about the need to change pro-health behaviors, but also to expand the circle of program recipients. It should be emphasized that educational programs addressed to the population must be adjusted to the content and scope of the perception of the poorest inhabitants, and should be implemented in tribal languages.

## **Conclusion**

In 2017, during the implementation of the Paramedics for Africa and Obruni comes back to Africa projects noteworthy differences in pro-health behavior among the residents of Ghana were noticed. Most of them contribute to the spread of many diseases that African developing countries are struggling with. Some pro-health behaviors result from the lack of access to water and electricity, others from beliefs, still coming from the culture of the country.

The biggest positive changes in pro-health behaviors can be achieved among those behaviors that are coming from lack of appropriate knowledge of the Ghana community. Spreading knowledge about changing the simplest hygienic habits of Ghanaians seems to be the main goal of implementing preventive and educational programs. The implementation of programs should include local educators who speak not only English, but who speak also tribal languages. The education of health-related behaviors should include as much community as possible, including medical staff.

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