KNOWLEDGE, PERCEPTION AND ATTITUDE OF PEOPLE TOWARDS SICKLE CELL DISEASE IN GHANA

Helen Aba Crentsil1, Mercy N.A. Opare-Addo¹, Richard Nii Lante Lamptey²

1 Kwame Nkrumah University of Science and Technology, Faculty of Pharmacy and Pharmaceutical Sciences,

Department of

Pharmacy Practice, Kumasi, Ghana.

2 Palm Beach Atlantic University, Florida, USA

Background

Sickle cell disease (SCD) is one of the most common monogenetic haemolytic disorders worldwide, with a high prevalence among people of African descent. However, sickle cell disease has hardly been viewed as a disease of any public health significance even though in Ghana, about 15,000 babies are born each year with this disease.

This disease has an intricate influence both on the individuals living with the disease as well as their families. From causing a fall in the quality of life and increased mortality to an often-high economic burden on individuals and families, this disease has many repercussions which goes beyond just the patient suffering from the disease. Despite its dilapidating effects, the burden of the disease has not been adequately addressed. This situation is worsened by limited and inaccessible formal social support structures, stigmatization and discrimination due to the lack of knowledge and awareness of the disease. This increases the need to increase awareness to reduce the occurrence of the disease and improve the quality-of-life of affected patients.

Objective

The purpose of this paper is to present a review of the knowledge, perception and attitude of people towards sickle cell disease in Ghana.

The results obtained from this research should help highlight the need for effective public health education on sickle cell disease. This is necessary to address misconceptions and increase the

knowledge level and understanding of the risks of having a child with sickle cell disease to influence premarital attitude and behaviour as well as personal reproductive options.

Method

The study, conducted in Kumasi, Ghana, was a cross-sectional design with a sample size of 338, with participants aged 18 and above. Non-probability sampling was used, focusing on residents willing to participate. Exclusion criteria included hospitalized individuals. A questionnaire with three sections were used to gathered data on socio-demographics, knowledge, attitudes, and perceptions towards sickle cell disease. Data collection occurred from February to April 2020 after obtaining ethical approval. SPSS was used for data analysis, employing descriptive statistics and tests like independent t-test and one-way ANOVA.

Results

This study involving 338 participants, focused on sickle cell disease awareness, revealing demographic insights, educational influences, and perceptions. Most participants were 18-24 years old, with an even gender distribution, and a majority was not married. A significant 89.6% had tertiary education. Participant awareness primarily stemmed from formal institutions like schools (23%), healthcare professionals (19%), and the internet (14%). While 99.4% had heard of sickle cell disease, only 60.1% knew their sickling status. Genotype distribution among the aware showed 69.5% AA, 23.6% AS, and varied percentages for others.

The study emphasizes the need for heightened education to prevent passing the trait or disease to offspring. Respondents recognized sickle cell disease as inherited (96.7%) and believed it to be incurable (85.5%). Life expectancy perceptions varied, with 40.8% believing patients could live

above 60 years. Occupation and education influenced awareness, with health workers and those

with higher education demonstrating better knowledge.

Barely 20% of participants knew any SCD organization in Ghana and about 49.1% of respondents

believe that patients with SCD are stigmatized. While almost all the respondents (93.2%) chose

that knowing their sickling status would influence their decision to marry someone. However,

40.5% respondents rated SCD awareness in Ghana as poor while 40.8% indicated that the

contribution of health professionals in increasing awareness for SCD in Ghana is mediocre.

Conclusion

The studies showed that while majority of the population is aware of sickle cell disease, many

lacked detailed knowledge, and some held incorrect perceptions. Statistically, variations were not

significant across demographics, except for education and occupation. This highlights the crucial

role of educational institutions in health awareness.

There is the need to increase public education on the disease to increase the knowledge, attitude

and perception of the people of Kumasi. In doing this, it will enable people to have a positive

perception and attitude towards disease. It will also constitute an important variable that influences

premarital attitude and behaviour, reducing the incidence of the disease.

Keywords: Sickle cell disease, knowledge, perception, attitude