

RESEARCH ARTICLE

INTERVENTIONS TO REDUCE SELF-MEDICATION: WHAT HAVE WE LEARNED?

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ABSTRACT

Creating awareness on the vast spread of self-medication practice among people in Nigeria and its effects on the Health care system is an important aspect of public health. This paper is written to review self-medication practice in Nigeria, and how self-medication campaign can be an effective strategy for reducing this practice. Furthermore, it will provide strategies that will help to conduct future programmes with various approaches. Interventions using interview for a focus group, running campaign in open places like market square, creating awareness through media such as Television, Radio, Newspaper, Social networks as well as hospitals and community settings, have been highlighted. The information presented has been withdrawn from the existing policies, systematic reviews, and new convincing policies that will drastically reduce the practice and improve the health outcomes. The evidence based however, does not contain the individual approach due to the fact that Public Health focuses on population rather than individual. Based on this paper, self-medication has a negative impact on the quality of health of individuals due to lack of consultation by the clinicians. It is therefore required to give attention to this practice.

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INTRODUCTION

Self-medication (SM) is defined as the use and collection of medicines to treat symptoms or sicknesses that is recognised and diagnosed by individual and not prescribed by clinicians (Afolabi, 2008). The prevalence of SM among Nigerians has increased and the extent of self-medication practice is impossible to measure; this ranges from small, young and old. However, evidence shown (Ali *et al.*, 2010) suggests that it is most likely common among uneducated especially market women who see it as a waste of time consulting doctors for common ailment. Similarly, evidence (Arikpo *et al.*, 2010) also asserts that it is not only with the rural communities and uneducated group but it has cut across range of categories.

What are the risks involved in Self-medication (SM)?

The risks are numerous and prompt actions are therefore needed to protect the well-being of the nation. It could be said that the practice encourages increase of fake drugs (also called counterfeit medicines) because of its low cost and easy accessibility. World Health Organization (2008) reports counterfeit medicines as a public health challenge because people fall victim of this if the packaging appears to be original but does not contain necessary ingredients.

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Below is the diagram illustrating how difficult it can be in identifying original and counterfeit drugs.



(Adapted from: Fighting fakes: a never-ending battle by Butschli, J. (2012).

Figure 1. Original and counterfeit drugs

The below diagram shows the same drug but one of them is a fake drug meaning active ingredients and production are not the same but they are having the same packaging.

*The practice of self-medication is leading to unnecessary death, disabilities, illness and loss of public confidence in medicine and health care system (Cockburn *et al.*, 2005).*

It is therefore essential to educate people on this practice to reduce the effects. A study (Fadare and Tamuno, 2011) found that there are common ailments like Cough, Diarrhoea; Sore throat and so on, which increase self-medication practice amongst the people. The common drugs are antibiotics such as Ampicillin, Co-Trimoxazole, Ciprofloxacin, Amoxicillin,

Metronidazole etc. Generally, it proves that it is dangerous to use medicines that are not prescribed due to difficulty in identifying the difference between fake and the original drugs and the practice is widespread disregarding the side effects. Awareness and education have been found to be the most effective strategies. A study (Higgins and Regan, 2004) demonstrated the user's problem of not recognising medication and the correct dosage, which cause incorrect self-diagnosis and drug abuse (Jovicic *et al.*, 2006). There should be an increased patient-clinician relationship (Jovicic *et al.*, 2006). Collectively, the evidence proposes that SM practice is a major problem confronting Healthcare system and Public health; therefore, SM programme will go a long way in helping people to understand the need to consult Health personnel.

Studies on some other effects/risks

- In case of Malaria, it causes high incidence of malaria (Kaushal *et al.*, 2012).
- Inappropriate use of antibiotics contributing to the risk of antibiotic resistance.
- Unreliable source of information on medicines such as friends/relatives, media and the internet.
- Health risk and economics burden to government will increase if there is no intervention (Kennedy, *et al.*, 2007).
- Miscarriages/bleeding in pregnant women (Kripalani *et al.*, 2006).
- Pathogenic resistance due to Self-medication (Murray, 2009).

On the contrary, developed countries like United Kingdom encourage self-reliance. This report has estimated an average of 50% of the healthcare that operates on SM with an understanding that an individual is responsible for his/her health (Afolabi, 2008). Moreover, the programme "*Expert Patients Programme*" is also organised in England to increase patient self-care skills especially, patients with long term illness (Nwachukwu *et al.*, 2006) and chronic disease (Oparah *et al.*, 2005). This programme has been effective due to well-planned patient self-reliance scheme and accessibility of health facilities for patients compared to many developing countries. However, it has been reported to be problematic in Nigeria where low rate of literacy and poor health care system are found.

Current Status

Despite the negative effect of this practice, knowledge of its side effects was not understood by many. Consequently, advertising medicines on media, and illegal sales of drugs in market places, along the street and in public buses, were common practices. Drugs like antibiotics are found in the open markets and being sold by persons unqualified to prescribe medicines. Behavioural lifestyle is very difficult to deal with in public health and has been found to limit the strength of education and awareness. People prefer SM due to reasons such as difficulty in accessing health facilities, low earning, and transport cost (Arikpo *et al.*, 2010). Other reasons could be low level of education and inequality in accessing health facilities among low income group particularly in rural places. Inappropriate display of some drugs over the counter drugs that give easy accessibility to the consumers have been a threat to the quality of care and increased importation of counterfeit

drugs. A study (Oparah and Iwuagwu, 2001) affirms patients' autonomy to access drugs without prescription and necessary instruction, has greatly increased. Therefore, continuous SM campaign can be "*a good strategy*" in educating people on the effect of SM without consulting a physician.

Self-medication Campaign

Given the hazardous effect of SM practice, SM campaign should be given high priority. All health workers need planned training to improve communication skills with their patients. It is important that people are enlightened on the effect of SM.

"Governments are needed to see the programme of interventions as part of a wider approach in developing and improving health care system".

The campaign covers all stages and was delivered based on the level of education of the audience. The message contained what self-medication means, example of common drugs, its effect, also promote how health centres can be easily accessible in different communities.

Community including consumers and Patients are needed to be reached through the following means:

- Seminars and workshop in educating people on the appropriate drugs to use which is only prescribed by the clinicians. Educating patients will help in knowing the appropriate drugs and medications required (Oparah, *et al.*, 2004). But caution would be taken as not to reveal the authentication and verification of medicine which should not go beyond pharmacists and Health professionals leading to admitting it as a waste of time consulting doctors for illness.
- Using public places like markets which is the most common selling areas for "drug hawkers" (person involved in illegal sale of drugs) to create awareness on the adverse effect of self-medication on their well-being. This is asserted by (Ali *et al.*, 2010) that market women are needed to be educated because of their accessibility to drugs by the drug hawkers that are encouraging the practice.
- Religion centres can also be a place of passing information to the users through Religion leaders. This is due to the honour and respect given to the religion leaders in the part of Nigeria.
- Campaign through posters, flashcards on educating consumers on the effect involved. Besides, publicity through media announcement can also promote the campaign (Ruiz, 2010)

There are some other strategies that will make minorities or those whose their voices are seldom heard in the community to participate in the campaign. This would be done by providing incentives such as soap for bathing, ticket for a day free transport, one kilo of flour/rice. This will encourage effective participation and increase good health outcome.

How Health practitioners contribute to the campaign

There would be collaboration with the health practitioners to increase quality and utilisation of recourses. Pharmacists have a role to play especially in medicated related activities and promotion of health (Shankar *et al.*, 2002).

It is indicated in (Wood and Brass, 2001) that the attitude of Nigerian pharmacists is increasingly high towards the pharmaceutical care despite the practice setting and average positive rating given by the society. However, evidence given (World Health Organization, 2008) suggests that patients or clients have low satisfaction with the pharmaceutical services rendered in the studied hospital. Therefore, there should be easy and friendly relationship between the pharmacists and the patient so as not to limit them from assessing hospital services and engaging in SM practice which can also be one of the reasons of practicing SM. Besides pharmacists improving system, Doctors are also required especially in the proper counseling and educating the patients during visiting hours, encouraging them to adhere to the use of their drugs and not to depend on the over the counter drugs, making them aware of the adverse effects in consuming fake drugs which is common in the society.

How government contribute to supporting the campaign

- There should be national policy on illegal sales of medicine.
- In the same way, there should be legal policies guiding pharmaceutical companies on the production and release of drugs into the community which will alongside reduce easy accessibility to medicines.
- It is equally important that seminars and workshops both locally and internationally are organised for pharmacists to increase their professional knowledge and skills in improving health care system.
- National Agency for Food and Drug Administration and Control (NAFDAC), Non- governmental organizations and The Ministry of Health can also be informed on how SM can be reduced. There should be monitoring of drug distribution in the society especially, some drugs that should not be found anywhere in public places.

Table 1. Programme of awareness campaign

SELF-MEDICATION CAMPAIGN PLAN

December 2012 & January 2013	Government agreement
January to February	Invitation to bid for the tender
February	Decision is reached for choosing service provider
March	Service provider signing the contract with immediate work
April to June	Campaign
June	Finalising report
July	Dissemination of outcome and Feedback

Some pharmaceutical companies have taken it as a responsibility in giving public warning to protect the society while others are withholding the information (Cockburn *et al.*, 2005).

- Disciplinary action should be taken on any misuse, abuse or mishandling of drugs without legal prescription. It is surprising that some of these law enforcement agencies are also involved in illegal distribution not thinking on the consequences this is contributing to the poor health system. Therefore, law enforcement agencies should be educated on the need to discourage distribution of illegal drugs thereby, limiting the practice of SM.

Procurement

Procurement is the process of goods and services being acquired by the third parties and from in-house providers

covering both acquisitions (Yusuff and Omarusehe, 2011). It could be said that it is a means of buying services from the initial advertiser through an agreed or written contract. Moreover, for the purpose of this campaign, open procurement will be used for requesting "willing providers" to bid for the tender. With transparency and openness, an agreement would be made on a particular company based on the history of their quality and also, their reputation.

Finance and Budgeting

About ten million naira (approx. £20,000) would be used in executing the campaign and creating awareness. This would be covering fixed and variable cost within the project and ability for these services to have a long term outcome. The service provider that wins the tender would be provided with the money to execute the project. There is assurance of sound investment decision which will prolong affordability and sustainability services for improved outcome. Again, there would be clear and transparent reports for accountability.

Monitoring and Planning

Monitoring of activity and budgeting to achieve desired outcome would be put in place. It is equally important that timely information on the services being provided from the service provider would be accurate. This will give the knowledge whether the provider is delivering services as agreed by contract or not. It will be based on the level of quality of campaign and the feedback from the community.

Feedback and Long term planning

In Table 1 below, a breakdown of the execution of the campaign is given.

By the end of the Campaign, there would be 20% likely reduction in SM practice among the local community due to open contract in employing skilled people to do the work and also, using different categories of targeting the audience. Although, there might probably be difficulty in reducing the rate at which pharmaceutical company releases medicines into the local community since most of them are private companies aiming to make profit through increase in productivity. Feedback on the services would be transparently provided for the government to know the degree of the outcome and how the programme had been effective.

Key Consideration and Summary

- The prevalence of SM practice is impossible to measure.
- The practice arose through easy availability of medicines to the community, patients' bad experience with health

practitioners on their previous visits. Also, difficulty in accessing health care facilities which result to disregarding the need for doctors' prescription.

- This practice has caused unnecessary mortality, morbidity and injuries. Also, loss of confidence in health care system.
- The problem can be solved through creating awareness, educating people through campaign on the means to reduce this practice.

Conclusion and Recommendation

Basically, SM campaign is required to reduce SM practice and the area of priority is to lower the burden of disease, reduce unnecessary mortality, morbidity and injuries, increase health system performance and reduce the importation of fake drugs. This programme will be extended to users (consumers, patients, communities) thereby increasing the awareness of the implication of Self-medication; Health practitioners in building friendly relationship with their patients; and Pharmaceutical companies in releasing drugs to qualified personnel to reduce easy accessibility to unqualified persons and drug hawkers. Finally, there would be national policy on the limitation of drugs being promoted in media. With these, there would be a drastic change in the practice of Self-medication.

Conflict of interest

The author declares no conflict of interest

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