Patients’ belief and adherence to their medication therapy in the Bawku municipality

Fredrick Owusu, Edem Amenuke, Philomena Entsie, Genevieve Yeboah and Rachel Aboagye

DOI: https://doi.org/10.22271/tpi.2020.v9.i8a.5033

Abstract
One important requirement for patients to believe and adhere to their medication is for them to have enough knowledge about the medications being dispensed to them. This can easily be achieved by effective counselling and motivation by health care professionals. The manner in which drugs are taken by the patient is often influenced by the way drugs are dispensed and the type of information given to the patient during the dispensing process. The aim of this study was to determine patient beliefs and adherence to their prescribed medications in the Bawku Municipality. The survey was carried out by the use of designed questionnaires. Out of the 100 patients interviewed, 62 % were males and 38 % were females. 14 % of the patients were illiterates and 86 % were literates. Side effects of drugs accounted for 84 % of patients skipping one or more of their medications. 67 % of patient missed their medication due to high cost. 51 % also missed their medication due to lack of knowledge on their therapy and 83 % were those having received inadequate advice by health care professionals. Also, lack of belief of patients in their medication was 65 %. In conclusion, patient’s beliefs and adherence to their medication was rated bad, and this is largely as a result of insufficient counselling to patients by health care professionals, lack of belief in their medications and high cost of prescribed medications.

Keywords: beliefs, adherence, medication

1. Introduction
Medication adherence can generally be defined as the patient’s compliance with the provider’s recommendation with respect to timing, dosage and frequency of medication taking during the prescribed duration [1]. It is a well-known fact that diseases especially chronic ones such as; hypertension, HIV/AIDS, diabetes, cancer etc., are a major source of disability and death worldwide [2]. One way of managing such disease conditions is by employing a pharmacological measure which involves taking prescribed medicines in the correct manner for maximum therapeutic response. Poor adherence can have a negative impact on both the potential clinical benefit of treatment and cost-effectiveness of medicines [3]. Non adherence to medication therapy is a global menace. The world health organization (WHO) estimates that about 50 % of patients who are on medications do not adhere to their treatment regimen [7]. A survey carried out in Nigeria and Ghana showed that only 34.3 % of patients adhered to their medications [1]. A census carried out in the Bawku municipality indicated 691 total deaths in the municipality of which accidental and homicidal death accounted for 9.6 %. The larger proportion (90.4 %) was due to disease conditions most of which are easily treatable [2]. Thus one major reason patients may not be responding to treatment is non-adherence to the medication regimen culminating in the high percentage observed from the statistical evidence [7]. Hence the need to assess patients’ beliefs and adherence to their medication therapy in the Bawku municipality.

2. Aim
To assess patient beliefs and adherence to medication therapy in the Bawku municipality.

3. Objective
To design a questionnaire to conduct a survey on medication beliefs and adherence in the Bawku municipality and analyze data collected.
4. Methodology

4.1 Setting
The survey was carried out at Vineyard hospital, Bawku Presbyterian hospital and Quality Medical Center all in the Bawku municipality.

4.2 Period of study
This study was conducted over a period of nine months.

4.3 Study population
A total of 100 questionnaires were handed out to 100 patients within the Bawku municipality. The questionnaires were issued to both males (62% of the total hundred) and females (38% of the total hundred) consisting of literates and illiterates. The questions were read out and interpreted in the local dialect to patients who could neither read nor write. The simple option was ticked with an indelible ink based on the patient’s choice. The questionnaires were designed to capture the age, gender, marital status, educational background, and possible causes of non-adherence. Patients were also asked their knowledge on the benefits and side effects of their prescribed medications. The responses to the questions were collected and the data analyzed using SPSS version 16. The questionnaires contained closed ended questions. Confidentiality of the study was assured.

5. Results

According to figure 1 above, majority of the populace involved in the study were 20 to 29 years with the minority being 70 years.

Out of the 100 patients used in this study, 14% were students in the junior high school, 12% were students in the senior high school, 60% were university students and 14% had not had any education at all.

78% of patients had missed taking their medications before and 22% have never missed taking their medications.

11% of respondents did not adhere to their medications because they had too many drugs to take, 48% simply forgot to take the medications, 5% were busy with other things and 36% were away from home and hence could not adhere.
84% of respondents were not adhering to their medication regimen due to the medication side effects.

45% of respondents had problems with taking medications at specific times and 55% of respondents did not face this problem.

Respondents who did not adhere to their medications due to high cost were 67% and those whose non-adherence were not due to high cost of the medication were 22%.

49% of respondents had knowledge on drugs they were taking for the first time while 51% of respondents had no knowledge on the drugs they were taking for the first time.

17% of respondents received advice about over the counter drugs from pharmacists and 83% of patients had not received advice about over the counter drugs from pharmacists.

50% of respondents had other worries aside being ill hence had their concentration on those while taking their medications and 50% of respondents did not have their concentration on other things while taking their medications.
17% of respondents had obtained pharmacists’ advice on compliance with therapy and 83% of respondents had not had any pharmacists’ advice on compliance with therapy.

65% of respondents did not believe in their medications but they took them anyway and 35% of respondents believed in their medications.

6. Discussion
Non-adherence to medications is a complex health care problem with high risk of morbidity and mortality and it is widespread among all age groups [6]. The study population was made up of people within the ages of 20 to 70 years and above with majority within 20-29 years. Non-adherence comes about as a result of different factors that may be patient-related, treatment-related or health care provider-related [6].

According to the results obtained from the survey, 78% of persons in the Bawku municipality had ever missed taking their medications and it was found that most of these people simply because they forgot to do so (Fig.4). Some had too many drugs to take at a time or were away from home or were busy with other things (Fig.5). Also, 84% of the study population admitted they were non-adherent to their medications because of the side-effects of the drugs (Fig.6). Some of the respondents indicated that they did not have any knowledge about the side-effects of their medications and because of how unpleasant some of these effects were, they stopped the medications on their own accord without consulting their health care providers.

The people of the Bawku municipality are mostly farmers and also engage in other time consuming activities which makes them unable to take their medications. Some of the respondents also believe in having a meal before taking medicines hence they do not take their medications until they have eaten so in effect, taking the medications at different times other than the stated regimen (Fig.7). High cost of medication is also one major cause of non-adherence [5]. 67% of the study population are non-adherent to their medications because they could not even afford them in the first place (Fig.8). About half the population of the Bawku municipality depend on the National Health Insurance Scheme for medical consultation, treatment and their drugs. Majority of the respondents indicated that drugs that are prescribed for them are not on the health insurance scheme hence the need to be paid for by themselves [2]. This becomes a challenge as most of them cannot afford it. This subsequently causes them to neglect the hospital drugs and resort to traditional preparations.

Most times, the attitude and lack of patience on the part of the patient and the crowded nature of the hospital pharmacies makes it difficult for the pharmacist to pry, ask and advice patients about their over-the-counter medications. Hence, they go home and take the prescribed medications as well as the OTC medications that may unknowingly cause an overdose or an interaction leading to unpleasant side effects. This ultimately makes them stop taking their medications [9]. 83% of the study population admitted that they did not receive any advice on their OTC medications from the pharmacist (Fig.10). Also, most patients do not have any knowledge about the medications they take (Fig.9) This makes compliance and adherence difficult. Some drugs take time to work, some have side effects which wear off a few days after taking the medications and these should be made clear to the patients. Generally, patients should be counselled on every drug as this helps to make it easier in adhering to their medications [10].

The belief of patients in their medications also helps in adherence, [3]. The people of the Bawku municipality believe in their traditional herbal preparations than orthodox medications as they claim to know what the herbal medicines contain and how it works for the ailment they have. They only resort to the orthodox medicines when the traditional preparations do not help them. 65% of the study population admitted they do not believe in the medications they take but only resort to them if it provides them with relief from their ailment (Fig.13) This makes it difficult for them to adhere to the medication regimen.

7. Conclusion
The patient and health care provider related factors which lead to non-adherence all stem from the patients not having enough information on their medications, especially; what it does, how it works, the side effects which are expected and of what benefits it would be to them when they take them as prescribed. This reduces their belief in the medications they take and eventually any side effect would make them non-adherent since they do not see the need in taking the medications anyway.

8. References
1. Boima V, Ademola AD, Odu sola AO, Agyekum F, Nwafor CE, Cole H et al. Factors associated with medication non-adherence among hypertensives in Ghana and Nigeria. International journal of hypertension, 2015.
2. Ghana Statistical Service, Population and Housing
3. Center for Disease Control and Prevention. Chronic Diseases, The Power to Prevent, the call to control. At a Glance. 2009.
4. Blaschke TF, Osterberg L, Vrijene B, Urquhart J. Adherence to medications: insights arising from studies on the unreliable link between prescribed and actual drug dosing histories. Annual Review of Pharmacology and Toxicology. 2012; 52:275-301.
5. Non-compliance with medications: An Economic Tragedy with important implications for Health Care Reform. The Task Force for Compliance. April, 1994.
6. Hugtenburg JG, Timmers L, Elders PJ. Definitions, variants and causes of non-adherence with medication: a challenge for tailored interventions. Patient Prefer Adherence. 2013; 7:672-682.
7. Brown MT, Bussel JK. Medication adherence: WHO cares? Mayo Clinic proceedings. 2011; 86(4):304-314.
8. Shahin W, Kennedy GA, Stupans L. The Impact of Personal and Cultural beliefs on medication adherence of patients with chronic illnesses: a systematic review. 2019; 13:1019-1035.
9. DiBonaventura M, Gabriel S, Dupclay L, Gupta S, Kim E. A patient perspective of the impact of medication side effects on adherence. BMC Psychiatry. 2012. DOI: 10.2.
10. Currie MG. Introduction to Pharmacokinetics. Journal of Nuclear Medicine Technology, 2018, 6-9.