Factors influencing adverse events reporting within the health care system: The case of artemisinin-based combination treatments in Northern Ghana

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#### Introduction (1)

Malaria is still a very serious public health problem in the world.

 In 2000, WHO recommended to malaria endemic countries to use ACTs to treat uncomplicated malaria.

In 2004, Artesunate Amodiaquine was introduced in Ghana.





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### Introduction (2)

- Challenges
  - Subsequently, Artemether-Lumefantrine &
    Dihydroartemisinin Piperaquine were also introduced.
- These ACTs have been used to treat uncomplicated malaria in Ghana for about a decade now.

 Previous studies reported side effects such as severe headache, body weakness, dizziness and vomiting.

## Introduction (3)

There is little evidence on the factors affecting adverse events reporting.

 This study was designed to explore factors influencing adverse events reporting in the KNDs of Northern Ghana.



### Main Objective

 To document the side effects from the use of ACTs and the factors affecting adverse events reporting in rural Northern Ghana

#### Methods

- The study was conducted in the KNDs in 2013
- The design was qualitative where 60 IDIs were conducted.
- Multi-stage sampling technique was used

- NVIVO 10 software was used to code the data before analysis.
- Ethical approval was given by NHRC-Ethics committee





#### Results





## Experience of side effects of ACTs

Body weakness and dizziness were reported.

"From my own experience, the common side effect is that some times when you start to take it (the drug) if you don't even take time, you will not complete the drug. When I took the artesunate-amodiaquine, my situation was even more than before, I mean the body weakness, the sickness became even worse than before" (IDI-35 year old male patient)

Vomiting, itching and loss of appetite were also reported.

"....When I took the artesunate-amodiaquine, I had no appetite and I also vomited each time I took it"(IDI-32 year old female patient).



#### Factors affecting adverse events reporting

#### 2 broad factors were identified

Provider-related factors

Patient-related factors



## Provider-related-factors (1)

- Lack of education for clients to report side effects.
  - Pressure at the OPD and dispensary
  - Lack of qualify staff at the dispensary
  - Language barrier

"That is the issue, usually, they are supposed to be told about it either at the OPD level or at the dispensary when they are issued with the medications. The problem is that it doesn't normally happen because we do not even have qualified staff at the dispensary to do the education. The language is also a problem and I remember when I was at Sandema, because of the language barrier, I could not communicate with the patients. Quite apart from that we do not have enough staff at the dispensary and that is also a factor because the few people who are there are usually under pressure to serve patients and as a result, there is no time to be able to educate patients on all these issues" (IDI-42 year old Pharmacist).



#### Provider-related-factors (2)

Unprofessional human relationship of some health workers towards clients also affected adverse effects reporting.

"Yeah at times when you go back to the health facility, they would shout at you and say that is the way the drug works; that is the way the drug works and if you don't want them to shout at you then you will not go back and tell them and rather prefer to keep it....When you take it again and it happens like that you will not go?" (IDI-31 year old female patient).



## Patient-related-factors (1)

Lack of awareness of patients responsibility to report when adverse events occur.

"Many of them (refers to health workers) do not give that information to us. Instead of them to tell you that when you take the drug and get side effects, you should come back to complain they don't do that. They will just give you the drugs and ask you to go and take and that is all. If they were to tell you that when you take the drug you will get this or that problem and when it happens like that you should come back to the hospital, they don't do that" (IDI-38 year old male patient)

"Yeah, for that one, it is our fault, for that one we do admit that the education is not well given" (IDI-32 year old health worker)





#### Patient-related-factors (2)

- Already known side effects
- Long queues at the health facilities
- Previous reports of side effects yielded no benefits.

"You know when I went and complained to them they did not do anything about it, they rather said it is the drug and it would go. Now that they said it is as a result of the drug and nothing else why then would you waste your time going if you take the drug again and get these side effects. That is why I did not report. When I talk about it for other people to know, they will not also go and report when they take the drug and experience these side effects because they know is it the drug that is working" (IDI-44 year old female patents).

# Suggested ways to improve adverse events reporting (1)

Health education to clients

Health workers should have patience and behave nicely towards their clients.

"...drug store attendants and the health workers at the hospitals should often inform patients of the possible side effects and also tell them to come back if they experience serious side effects after taking the drugs for the to examine and know what the problem is" (IDI-38 year old female patient).

"...we (health workers) should have patience towards our clients and try to educate them about the side effects and also encourage them to report when they get these side effects at home...." (IDI- 41 year old health worker).



## Suggested ways to improve adverse events reporting (2)

Patients who experience side effects should not be made to join queues at the health facility.

"...The doctors should make it such that when you take the drugs and get side effects you should walk straight to the doctor and complain to him, it should not look like you are coming for the first time where you would go and follow line for long before you see the doctor to give your complain about the side effects you got from using the drugs they gave you"(IDI-39 year old female patient)



#### **Discussion**

- It is reported that noncompliance to guidelines to the use of medications accounted for drug side effects.
  - Eating very well before using medications
  - Over dose of drugs.
- Lack of health education to clients

Is it demonstrated in previous studies that 75% of people who experienced side effects did not report them.

#### Conclusion

 Intensive and continued health education should be incorporated into the routine health care activities.

- Patients who experience side effects should be properly taken care of and also they should not be made to join queues at the health facility during review visits.
- Improving health worker attitude towards clients will encourage people to report side effects.

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