

# Community and Health Care Providers Perception on Quality of Private Sector Outpatient Malaria Care in North West Ethiopia: A Qualitative Study

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## Research

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# Abstract

Malaria is one of the most important public health problems in Ethiopia contributing to significant patient morbidity and mortality. Prompt diagnosis and effective malaria case management-through public, private and community health facilities has been one of the key malaria prevention, control and elimination strategies. The objective of this study was to evaluate perceptions of adult malaria patients and healthcare provider on quality of malaria management at private sector outpatient facilities. An exploratory, descriptive, contextual, qualitative research methodology was conducted with 101 participants (i.e. 33 in-depth interviews and ten Focus Group Discussions with 68 discussants). All interview and Focus Group Discussions were audio recorded, transcribed verbatim and analysed using eight steps of Tesch (1990). During data analysis a single theme, two categories and six sub categories were emerged, namely (1) Perceived quality of malaria management at outpatient facilities; (a) essential resources ; (a1) safe outpatient services; (a2) antimalarial drugs and supplies; (a3) health workers; (b) factors influencing service utilization ; (b1) Physical accessibility; (b2) "Art of care"; and (b3) efficient malaria diagnosis and treatment services. Finally, enhancing good governance and stewardship of the public sector to tap the potential of private sector, build the service providers capacity and empowering the community on seeking early medical and safety were recommended.

## Background

Malaria is an entirely preventable and treatable parasitic disease [1]. In the last two decades, substantial progress has been made in fighting malaria [2]. According to the latest estimates of World Health Organization (WHO) between the year 2000 and 2015, globally, malaria case incidence was reduced by 41% and malaria associated deaths rate by 62% [3]. However, at the beginning of 2016 still malaria was considered to be endemic in 91 countries and territories, with approximately 212 million cases and 429,000 deaths reported in 2015 alone [3].

In Ethiopia, just like other part of sub-Saharan Africa (SSA), malaria is the major public health problem affecting 75% of the 1.1 million square kilometre land mass and where over 60% of the population live at risk of acquiring the diseases [4], a country of 99 million people in 2015 [5]. In malaria endemic countries, the private health sector is a major provider of treatment for malaria and for non-malaria fever [6]. However, patients' treatment-seeking practices vary between and within countries, but overall, worldwide approximately 40% of patients with suspected malaria seek care in the private sector [7]. Similarly, the fifth National Health Account (NHA) conforms close to one fifth of malaria patients in Ethiopia received diagnosis and treatment services from the formal private health sector [8][9].

On one hand, the private health sector has significant effect at patient and providers level; have effect on quality of care; encompassing safety, effectiveness and patient experience. They can also work to improve equity of access, making care affordable, and reaching out to marginalized populations. In addition, at the ecos-system level, the private health sector will have impact through training of health workforce; contributing to the retention of health workforce within the country and efficient use of

resources [10]. On the other hand, there are substantial concerns about quality and safety of care among some private providers, the equity impact of patients' out-of-pocket payments, and a lack of integration with the public health system some to mentions among the lists [11].

The Ethiopian Health tier system has three levels. This tier system includes: the lowest level being Primary Health Care Unit (PHCU) which consists of one health centre and five satellite health posts per 15000 - 25,000 rural or one health centre for 40,000 urban populations, and primary hospital targeted 60,000–100,000 population. The second higher level is General Hospital targeted 1 to 1.5 million people. And the third higher level is specialized hospital targeted for 3.5 to 5 million people [12]. The private health sector complements the public health services for shared improved health outcomes with the health sector. Furthermore, according to the Ethiopian national minimum standards [13] a medium private clinic should be led by personnel who achieved educational level either Medical Doctor or Public Health Officer or Bachelor of Science in Nursing. And to run a functional clinic a minimum of four additional health personnel (i.e. 2 diploma nurses and 2 laboratory technicians) should be available in a single facility.

The WHO (2011) and EFMOH (2017) recommends access to universal parasitological diagnosis and prompt treatment with effective antimalarial drugs for confirmed cases through public health facilities, private health facilities and community level [4] [6]. Despite the Ethiopian government and its development partners facilitated the availability of malaria care services free of charge through the public health facilities and community health services. Significant number of population sought diagnosis and treatment services within the private health facilities. Quality of services significantly affected by the perception of both the healthcare providers and services beneficiaries in terms of clinical decision and compliance with treatments [14]. Therefore, engagement of healthcare providers, and patients or care takers improves access to and demand for affordable standardized public health services. However, the perception of both healthcare providers and adult outpatient beneficiaries towards quality of malaria service had never been explored and described in Ethiopia [15]. Hence this qualitative exploratory descriptive study was conducted by the researchers.

## **Problem Statement**

Globally, malaria remains the leading cause of morbidity and mortality and more so in sub-Saharan Africa (SSA). Universal prompt malaria diagnosis and effective treatment is one of the malaria control, prevention and elimination strategies [4][16]. The Federal Ministry of Health, Ethiopia, provides malaria diagnosis and treatment services at no cost at a public sector level. Currently, in Ethiopia the private health sector is seen as an untapped potential to improve the quality of healthcare services. The country's health policy over the last 24 years demonstrates the government commitment to the sector as evidenced by the increase in the number of private health facilities to about 7304 (75 hospitals 19 Health Centres and 7210 clinics) in the year 2015 [17][18][19]. But higher number of health facilities might not be enough to ensure provision of malaria diagnosis and treatment services to the national standards. In addition, community and healthcare provider's perceptions on quality of services have direct influence on clinical

decision and utilization of malaria diagnosis and treatment services [14]. Therefore, perception of the community and health providers in malaria outpatient services should be evaluated regularly.

## Purpose Of The Study

The purpose of this study was to explore and describe the perception of adult malaria patients and healthcare providers on quality of malaria management at private sector outpatient facilities in four districts, namely: Finote Selam, Jabih Tehina, Bure and Womberma of West Gojjam Zone, North West Ethiopia.

## Definiton Of Key Concepts

*Private*: the word denotes two sets of structures; the for profit private encompassing commercial enterprises of any size and the non- profit private referring to the Non-Governmental Organization (NGO), philanthropic entities and other not for the profit [20]. Similarly, as cited in Hanson & Berman (1998), Bennett (1992) define 'Private' Providers are those who fall outside the direct control of government [21].

*Private health sector*: comprise all providers who exist outside the public sector, whether their aim is philanthropic (not-for-profit) or commercial (for profit), and whose aim is to treat illness or prevent disease [20].

*Private Health Facilities*: are health facilities owned by individuals who seek to earn profit, clinics and hospitals owned by private employers, those operated by religious missions and other non-governmental organizations (NGOs) [21]. In this research private means health facilities established for profit, which provide healthcare services based on users fee and include Medium Clinics.

*Outpatient Facility (Ambulatory Setting)*:: a type of institutional organized health setting in which health services are provided on an outpatient bases [22]. According to the definition of *Microsoft Encarta* (2009), outpatient is a patient who is not hospitalized for 24 hours or more but who visits a hospital, clinic, or associated facility for diagnosis or treatment [23]. Treatment provided in this fashion is called ambulatory care." In this research outpatient facility means that all malaria diagnosis and treatment services available in selected private facilities for the management of ambulatory patients.

*Uncomplicated malaria*: "symptomatic malaria without signs of severity or evidence vital organ dysfunction. The signs and symptoms of uncomplicated malaria are non-specific. Malaria is, therefore, suspected clinically mostly on the basis of fever or a history of fever" [16].

## Research Methodology

### Design of the study

In this cross-sectional an exploratory, descriptive, contextual, qualitative study with thematic analysis was employed to deeper understanding of beneficiaries and healthcare providers perceived quality of outpatient malaria care services in private health facilities [15][24] located in four districts of West Gojjam Administrative Zone, Amhara Regional State, North West Ethiopia,

## Setting of the study

The Amhara Region, where this study was conducted, is one of the nine administrative regional states and two City Governments of Federal Democratic Republic of Ethiopia. West Gojjam Zone is one of the ten Administrative Zones of Amhara Region. It covers an area of 13669 square kilo meters and the zone is further divided into eighteen *Woredas* (Districts). *Woreda*, is an area delineated as the basic unit of planning and political administration at the lower level and further subdivided into the lowest government administrative units known as *Kebeles* (villages) [25]. Finote Selam Town is the capital of West Gojjam Zone, which is located 385 kms North West of Addis Ababa, and 180kms south of the Amhara Regional Capital City Bahir Dar. Based on the 2007 National Population Census, West Gojjam Zone had a projected population of 2,517,825 million people in the year 2015, and 87% of them were rural residents [26]. According to the routine Health Information System report (July 2013 - June 2014), malaria (104,202/743851; 14.04%) is the second among ten top leading causes of morbidity in the zone [27]. Eleven medium clinics are providing malaria diagnosis and treatment service in the study areas. All medium clinics are established as private for profit organizations, but 6 out of 11 facilities are serving the community through Public Private Partnership (PPP) for malaria care services where partner facilities had access for anti-malaria supplies and received technical support from public health sector.

## Population and sample size

The research population for this study was adults of greater than 18 years of age who were outpatient malaria service beneficiaries and healthcare providers working in the targeted eleven medium clinics in Finote Selam, Jabih Tehina, Bure and Womberma districts, West Gojjam Zone, North West Ethiopia.

West Gojjam Zone is selected with purposive sampling for its accessibility to the main road and convenience to researchers. However, *Woredas* are selected based on high burden of malaria. In the year 2012, the incidence of malaria (Fig 1) in selected four *Woredas* were ranging from 40 to over 100 per 1000 population/November 2012 [28]. All eleven medium clinics are enrolled in this study. The researcher collected qualitative data from 33 healthcare providers who were working in the outpatient facilities of eleven medium clinics. In addition, the researcher collected data from ten (five men and five women) focus group discussions (FGDs) were facilitated with 68 adult outpatient services beneficiaries who diagnosed and treated for uncomplicated malaria infections. Six to eight patients voluntary consented to participate in this study were identified with their permanent address and remind twice to participate with cell phone. Each FGD consists of 6 to 8 discussants.

## Data collection

Data were collected through in-depth individual interviews, FGDs; and field notes. The semi structured in-depth interviews were conducted with 33 healthcare providers. In average each in-depth interview lasted 45 to 60 minutes. In addition, the FGDs were facilitated with 68 adult outpatient uncomplicated malaria diagnosed and treated patients. In average each FGD lasted within 1:30 hour. Furthermore, the researcher took handwritten notes through observing patient and health workers interaction; and assesses the outpatient facilities. Those patients who consented to take part in this research and completed their antimalarial treatment prior to the data collection were enrolled in the FGDs. The FGDs were consists of five males and five females' groups. The data collection was ceased based on saturation or redundancy of data [29].

## Measures For Ensuring Trustworthiness

Emlan (1995) cited Lincoln and Guba (1985) four criteria for trustworthiness [30]. The criteria are truth value, applicability, consistency and neutrality [31]. In this research rigors were ascertained through concepts of Lincoln and Guba (1985) extended these criteria to the qualitative paradigm and translated the terms to credibility, transferability, dependability and conformability have been used to describe various aspects of trustworthiness [31] [32]. See the table 1 below for applicability of these criteria in this study.

Table 1  
Measures for ensuring trustworthiness

Strategy	Criteria	Applicability
Credibility	Prolonged engagement	The researcher served as malaria program manager for over six years; in addition, in this study during data collection, the researcher spent over three months in the study area.
	Triangulation	The data were Collected using semi structured in-depth interviews, Focus Group Discussions, and Observation
	Peer debriefing	A sociologist with qualitative research expertise recoded the data and consensuses were reached on the theme, categories and subcategories.
	Member check	During data collection the researcher verify the word of interviewees through paraphrasing; during analysis emerging themes and categories were shared with research participants; and finally, the result is shared with research participants in the study area.
Transferability	Dense Description	The research presented the context with dense description; and detail presentation of the result with transcript verbatim was given.
Dependability	Dependable audit	A sociologist recoded the data.
	Triangulation of data	Data were collected using audio tape recorder, type verbatim transcript, field hand written notes and observation.
	Dense description	Detailed description of methodology was presented.
Conformability	Triangulation	Triangulation the finding of the researcher and independent research expert was considered.

## Ethical considerations

The study was approved by the institution review boards (IRB) of University of South Africa (UNISA) and Amhara Regional State Health Bureau, Research and Technology Transfer Core Process. The supporting letter was obtained from West Gojjam Zone Health Department, Finote Selam, Jabih Tehina, Bure and Wonberma *Woreda* Health offices. Additionally, all participants were informed about the overall purpose of the study, procedures of the study, methods of data collection, benefits and risk of participation, confidentiality; and their right to withdraw anytime during the in-depth interview and Focus group discussions and estimated time to complete the task. After receiving information all study participants signed voluntarily the on the consent form. To maintain the confidentiality of collected data, anonymity was maintained throughout the research process [33] [34].

## Data Analysis And Discussion

According to Creswell (2014) in qualitative approach, the researcher analyses the data inductively to build from particular to general theme and interpret the meaning of the data [35]. In this study the data analysis was conducted based on Tesch's (1990) method as cited in Creswell (2014) [35]. The data analysis process followed the eight steps of Tesch, namely: (1) get a sense of the whole through reading all transcript (2) pick one on the top of the pile, the document were read and re-read the data; then ideas were jot down at the margin of each page; (3) after completing the second step for several files, the investigator list topics into columns; and topics will be abbreviate as codes; (4) the researcher take the list, review the data and abbreviated codes were written next to the text; then perform preliminary organize the arrangement to see if new categories and code emerge; (5) select most describing words or category; see the data for internal convergence and external divergence; (6) make final decision on each categories and alphabetize the codes; (7) assemble the data material belong to each category and perform preliminary analysis; and (8) Furthermore, the raw data were re-coded by experienced qualitative researcher and consensus discussions were arranged on the theme. During data analysis a single theme, two categories and six sub-categories were identified.

### *Biographic Data*

The mean age with standard deviation ( $\pm$ SD) of thirty-three health workers who participated in semi structured in-depth interview in this study was 33.4 ( $\pm$  8.3) years. Their median age was 32 years. And the age range was 35 (58–23) years. A little higher than half (51.51%; n = 17) of the in depth interview participants fall into the age category ranges from 25 to 34 years. The majority 69.69% (n = 23) of the participants were males. With regards to the marital status of the participants, slightly higher than two third (69.69%; n = 23) were married. In addition, the majority of the participants 86.95% (n = 20) achieved diploma level of education i.e. 10 grade completed +3 years college study. The mean service year tenure with standard deviation ( $\pm$  SD) by the participant was 10.3 ( $\pm$  8.9) years; the median was 8 years; and the range was 36 (37 - 1) years. Hence, the majority of the health workers serving in the private health facilities are well experienced in the health systems.

The mean age of 68 focus group discussants with standard deviation ( $\pm$  SD) was 28.6 ( $\pm$  7.5) years. The median age was 26.5 years. And the range was 39 (59–20) years. Slightly higher than one third 35.3% (n = 24) of the FGD participants were categorized between the age of 18 and 24 years. Close to half 33(48.5%) of the participants were females. Three fourth (75%; n = 51) of the discussants were married. And one third (33.3%; n = 24) of the FGD participants were achieved college diploma (i.e. equivalent education with completed secondary school at 10<sup>th</sup> grade + 3 years college study).

## **Findings**

The qualitative data obtained from semi-structured in-depth interview with Health Care providers, FGDs with patients and field notes identified a single theme, two categories and six sub categories.

### *Perceived quality of outpatient malaria services*

Perceptions of quality of services by the health workers, patients or caretakers have a significant effect on clinical decisions and utilization of available services, respectively [14]. This theme featured the perception of Patients and Health Workers on the quality of private health facilities' in outpatient malaria care services. There are two categories revealed in this theme, namely: (1) Essential Resources and (2) factor influencing utilization of outpatient services (see Table 2).

Table 2  
Theme: Perceived quality of outpatient malaria services

Theme 1	Categories	Sub-categories
Perceived quality of outpatient malaria services	Essential resources	Safe outpatient facilities
		Antimalarial drugs and supplies
		Health workers
	Factors influencing utilization of outpatient services	Physical accessibility
		"Art of care"
		Efficient malaria diagnosis and treatment services

### *Essential resources*

The perceptions of health workers and customers on outpatient's services have positive and negative behavioural effects on their clinical decisions and patients' compliance with health workers advice, respectively [14]. In this category, the researcher identified three sub-categories namely: (1) safe outpatient services; (2) anti-malarial drugs and supplies; and (3) health workers.

### *Safe outpatient facilities*

Early in the history of nursing, Florence Nightingale (1946) advocated for safe care [36]. She also continued teaching nurses in their practice to put the patient in the best possible condition. The Council of the European Union (2009) defined patient safety as freedom, for a patient from unnecessary harm or potential harm associated with health care [37]. Similarly, The World Health Organization (2010) defined patient safety as prevention of errors and adverse effects to patients associated with healthcare [16]. The Safety and WHO (2011) program describes in the core element of improving patient's safety, which can be addressed by everyone's: health professionals, managers, cleaners and catering staff, administrators, consumers and politicians [6].

In this study, the majorities of health workers perceived that the private sector's outpatient malaria care services facilities were safe for patients or/and care takers. In addition, the health workers perceived the quality of outpatient care for malaria patients in the private medium clinics in terms of better facilities with regards to water supply, electric power supply and experiences of healthcare providers. The following verbatim clearly explains the health workers perceptions regarding safe and comfortable waiting areas:

*"The waiting area in my clinic is adequate and safe, equipped with comfortable seats, and video shows."*  
[In-depth Interview: HF2, HW1]

Another health worker had to say this about safe outpatient facilities with their good biohazard management:

*"Private clinics have piped water supplies, and uninterrupted electric power sources which are essential for cleaning and sterilizing medical equipment."* [In-depth Interview: HF2, HW1]

*"My clinic has a fence to protect access to bio-medical hazard by humans and animals, with a clean compound and it is safe for patients or to their attendants and community at large."* [In-depth Interview: HF11, HW1]

Another participant of in-depth individual interviews explained the perception of quality of outpatient services with regarding the availability of competent and experienced health workers in the following manner.

*"In our health facilities, all of us [health workers] have a valid professional licensure from Ethiopian Food, Medicine and Health Care Administration Authority; we can provide safe services in the national health system."* [In-depth Interview: HF1, HW1]

*"[name] private clinic hires experienced health workers."* [In-depth Interview: HF10, HW2]

In addition, the focus group discussants perceived private outpatient malaria facilities to be nice and small health facilities that have a few well-labelled rooms that enable patients to easily walk in order to get safe outpatient malaria services. The following verbatim statement was articulated by one of treated adult malaria patient who utilized private sector outpatient services:

*"Unlike hospitals or health centres, private clinics have few rooms with labelled signs; I can easily reach where I want to go whether it is laboratory or bath or injection rooms."* [FGD2: Participant M (2)]

On the other hand, a few health workers and some malaria outpatient's services beneficiaries stated their safety concern and a higher risk of acquiring diseases through the private facilities poor quality outpatient malaria services. One of female focus group discussant had this to say her safety concerns:

*"The majorities of the auxiliary staff, who work in the private clinic, are not able to be employed within the public health sector, and they may not pass the national exam prepared by the centre of excellence."*  
[FGD5: Participant F (1)]

In-depth interview participants elaborated on their safety concerns in relation to facilities for service provi by saying:

*"My laboratory room size is too small compared to the nationally recommended standard of 20 square meters; it is difficult to provide safe services."* [In-depth Interview: HF4, HW3]

*“Almost all private clinics are constructed for individual housing; it is difficult to make it a standard health facility.” [In-depth Interview: HF5, HW1]*

### *Anti-malarial drugs and supplies*

In this study, almost half 6 of targeted facilities had a signed Memorandum of Understanding (MoU) with/between Town Health Office, Zone Health Department and the Regional Health Bureau to work with Public Private Partnership for malaria case management. This legal relationship enables partner private health facilities to get antimalarial drugs and supplies and receive technical support. In this study, the majority of health workers perceived frequent stock-out, interruption of supplies; lack of reliable laboratory supplies to seriously affect the quality of their malaria outpatient services [38]. The following verbatim statements were made on the stock out and interruption of antimalarial drugs as a perceived challenge to provide high-quality outpatient malaria services by two health workers:

*“.... health facility engaged in Public Private Mix Partnership for malaria care services, though we have a valid Memorandum of Understanding with the District Health Office, Zone Health Department and Regional Health Bureau, our service quality was seriously affected by frequent stock out and interruption of antimalarial drug supplies. This unreliable access to supplies has some harm on our reputation. Our clients feel as if we don't want to give them the drug while it is their right to get antimalarial drugs free of charge within our facility.” [In-depth Interview: HF2, HW3]*

Health workers from HF8 and HF10 perceived shortage and lack of quality assured laboratory supplies afflicts the quality of outpatient malaria services:

*“There is a shortage of laboratory supplies; I couldn't get absolute methanol which is useful to fix thin blood film. Therefore, I use to work with less reliable methods to report accurate malaria parasite species and quantify using thick blood film. This is not in agreement with the recommendations of the National External Quality Assurance (EQA) guidelines, which states thick film for screening for the presence of the parasite in blood and the thin film to identify species and quantify the parasite load.” [In-depth Interview: HF8, HW2]*

On the other hand, malaria treated patients clearly depicted that availability of various antimalarial drugs and laboratory services attract them to regularly visit private clinics.

*“If you visit public health facilities, you don't get either the laboratory service or the drugs, while in private health facilities there are a number of antimalarial drugs...” [FGD1, Participant F (3)]*

*“I went to the public facilities, there were no drugs, and I got the necessary drugs from private facilities.” [FGD5, Participant F(5)]*

This finding was in line with Onwujekwe, Uguru, Etiaba, Chikezie, Uzochukwu and Adjagba (2010) and Deressa and Ali (2009) who reported that availability of better-quality diagnosis, essential drugs and other supplies are the major factors for patients to visit the private health facilities [39][40].

## *Health workers*

The presence of qualified, motivated and competent human resource is essential to provide standard health services for patients [41][42][43][44]. In this study the majority of the health workers and patients' perceived high quality of outpatient malaria services in line with the availability of experienced and competent health workers in the targeted health facilities. Some of the health workers reported that they are committed to hiring experienced health workers to exceed beyond the expectation of their customers. One of the health workers from HF2 had to say:

*"Our patients expect high-quality services from us; we always prepared ourselves to exceed their expectations... we used to hire experienced health workers." [In-depth Interview: HF2, HW1]*

In addition, malaria treated patients explained their perceptions based their most recent visits to the private health facilities as health workers were working hard to meet their expectation. The following statements showed the experiences of adult malaria patients:

*"I am one of the regular customers of this [name] clinic for over 12 years; the facility has experienced specialist doctors, nurses and laboratory professionals... all were working hard to identify my health problem and treats me in a good manner." [FGD2, Participant M (5)]*

However, some of the FGD discussants reported as they were received low-quality healthcare services by junior and non-experienced health workers.

*"...in private health facilities, we used to visit for be examined by highly experienced health workers, mostly owners or managers of the health facility. However, there are junior and non-experienced health workers within the team.."*

Similarly, one of the FGD1 discussants had to say:

*"...the health worker took blood sample from my fingertips but she didn't give me at least clean cotton to hold on the bleeding site..." [FGD1, Participant F(1)]*

## *Factors influencing utilization of outpatient services*

Patient's perception of quality of outpatient care has a direct influence on consumer's selection of their health providers. Studies confirmed that perceived and actual quality of care has a direct effect on health outcomes [39][45]. In this study, most patients elicited their positive perception on the outpatient malaria care services they received from private health facilities. However, some patients reported their concern on the availability of effective drugs and competent health providers. The researcher presented the three sub-categories, namely: (1) physical accessibility; (2) "Art of care"; and (3) efficient malaria diagnosis and treatment services.

### *Physical accessibility*

According to Kelley and Hurst (2006) accessibility is defined as the ease with which health services are reached [46]. They also added that access can be explained by physical, financial or psychological factors, and requires that health services are a priori available. Jimam, David, Galam, Joseph, and Buoye (2015) identify distance from the health facility as one of the barriers for a community member to seek malaria care services [47]. In this study, the majority health workers reported that their service quality in terms of convenience in opening hours, located within a short distance for the community, and offered with affordable cost for the general public. The following statements were forwarded by the health workers:

*"The service hour is convenient for all our clients. We are open for about 16 to 18 hours per day seven days a week." [In-depth Interview: HF8, HW 1]*

*"My customers come from both the rural and urban area of West Gojjam zone and our service cost is affordable for our customers, otherwise we couldn't stay in business." [In-depth Interview: HF2, HW1]*

In addition, malaria patients elaborated as they received an accessible malaria services without any discrimination. The following transcripts from FGD10 clearly show the existence equal treatment among service beneficiaries in targeted health facilities:

*"In private health facilities they equally served their customers; whether you are poor or rich; urban or rural dwellers; wear clean or dirty clothes; literate or illiterate." [FGD10, Participant M (4)]*

*"In my district, access to malaria treatment is high, and can get service within one hour; the private health facilities don't give priority to urban dwellers, and better off. Since we all get the service with service fee out of our pocket, everybody equality treated by health providers." [FGD10, Participant M (1)]*

In addition, two FGD discussants elaborated that accessibility of services were not deterred by a distance of health facility from their home:

*"I come here within 10 minutes of walk on foot; I am very close to the [name] clinic" [FGD9, Participant F (5)]*

*"My home is very far, it is about 50 kilometres away from here [Finote-Selam] but my children bring me here for better quality of services." [FGD10, Participant M (7)]*

*"Art of care"*

Chochinov (2007) recommends a four-pronged framework for healthcare providers to enhance patient's dignity; namely, attitude (A), behaviour (B), compassion (C), and dialogue D) [48]. According to the above stated framework, healthcare workers are expected to explore their attitudes and assumption towards patients; they should also strive to change their behaviour; compassion, which refers to 'a deep awareness of the suffering of another coupled with the wish to relieve it' and exchange of extensive information within a partnership whose tempos set by gathering, interpreting and planning to new and

emerging details. Similarly, Silva (2014) and Christalle, Zeh, Hahlweg, Kriston, Härter, and Scholl (2018) attests the key components of person-centred care include compassion, dignity and respect [49] [50]. These may be demonstrated via shared decision making, supporting self-management and proactive communication [49]. In addition, with a study conducted in referral hospital of Amhara region, Tayelgn, Zegeye and Kebede (2011) confer welcoming attitude to clients, the offering of seats to patients, effective communication and patience to clients as some of the characteristics of quality if healthcare services[51].

In this study, most of the private clinics health workers have the art of care, which is compassionate, respectful and caring in nature. The health workers believe the private health sector wouldn't survive in business if it was not responsive to patients' need and demand in many ways. The following verbatim presented in the words of the majority of in-depth interview respondents:

*"I always greet my patients and ask about their families and community, and then I respectfully listened to their health problems. I also try to express my empathy and feeling properly. Finally, I encourage them to participate in selecting their treatment." [In-depth Interview: HF1, HW3]*

*"Every time, when patients get into my clinic, I used to screen for life threatening situation and the second thing I do is alleviating severe pains. Then, I will take detail medical history, perform a physical examination and order selective laboratory investigations. Finally, I try to involve the patient in the management plan for their identified health problems." [In-depth Interview: HF10, HW1]*

The adult malaria patients from FGD had to say this about fast, respectful, caring service:

*"The service I received in the [name] clinic was fast, the health workers were showing me their respect and take care of me throughout the process." [FGD8, Participant M(8)]*

### *Efficient malaria diagnosis and treatment services*

According to WHO (2006b), an efficient health service is the one which strived to maximizes resource use and avoids waste [44]. The most efficient and gold standard malaria diagnostic method is malaria microscopy [52]. In addition, treating malaria patients with quality assured drugs reduce the cost of medical services and a waste of resources [53]. In this study, the researcher found that health workers used to diagnose and treat patients through inefficient ways. The result shows that most febrile patients were investigated with less sensitive and specific antibody test, malaria diagnosis with only thick film and patients with negative results were treated for malaria; and treating uncomplicated malaria cases were treated with three or more antimalarial and other drugs. Therefore, the malaria outpatient services are inefficient. Three individual in-depth interview respondents from HF2, HF3 and HF7 had to say:

*"Our patient wants over treatment; we are not efficient in using limited resources. We used to prescribe antimalarial drugs, with vitamins, dextrose, antibiotics etc..." [In-depth Interview: HF3, HW3]*

“If my patient is negative for malaria, I will repeatedly check before I declared fever with malaria unlikely ...” [In-depth Interview: HF7, HW2]

Adult malaria patients stated that the service they received from private health facilities' outpatient malaria services were not efficient in diagnosis and treatments. The following statement is forwarded by FGD1 participant:

“I received treatment for malaria, typhoid and typhus fever. I took over four drugs: Coartem, Ciprofloxacin, Doxycycline, and Paracetamol. The prescription I collected from the clinic was full of text from head to toe.” [FGD1, Participant F(3)]

## **Conclusions**

This qualitative exploratory and descriptive study was conducted in West Gojjam Zone of Amhara Region, North West Ethiopia. The result of the study suggests that both adult malaria outpatient service beneficiaries and health providers had positive perceptions on the availability of good quality of services. However, there are area of improvements in terms of ensuring safety of patient and healthcare providers, interruption of antimalarial drugs and supplies, poor quality of laboratory reagents, and inefficient management of malaria patients.

## **RECOMMENDATIONS**

Based on the result of this study, the following recommendations are made to improve the quality of outpatient malaria service through private sector: (1) Enhancing good governance and stewardship of the public sector to exploit the potentials and capacities of the private sector through exercising well-functioning collaborative public private partnership; (2) Providing tailored capacity building to private health sector providers through case management trainings, coaching and mentorship; (3) Empowering the community to seek medical care and the necessary biosafety using targeted Social and Behavioural Change Communication strategies; and (4) Future research on effectiveness of Public Private Partnership is recommended.

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## **Abbreviations**

EFMOH: Ethiopian Federal Ministry of Health; EMIS: Ethiopia malaria indicator survey; FGD: Focus Group Discussion; NGO: non-Governmental Organization; PHCU: Primary Health Care Unit; PPPs: public-private partnerships; RDT: rapid diagnostic test; RHB: Regional Health Bureau; SSA: sub-Saharan Africa; UNISA: University of South Africa; WHO: World Health Organization.

## **Declaration**

## **Ethics approval and consent to participate**

Ethical clearance was obtained (Certificate reference number: HSHDC/350/2014) from the Health Studies Higher Degrees Committee (HSHDC), College of Human Sciences (CHS), UNISA. Prior to the commencement of data collection, the final version of the study protocol, together with the UNISA ethical clearance, was submitted to the Amhara Regional State Health Bureau, Research and Technology Transfer Core Process with certificate reference number: H/R/TEC/82/08. And permission to conduct the research was obtained from the local Institution Review Board (IRB). In addition, a support letter from the West Gojjam Zone Health Department was received. Written consent to conduct in-depth individual interview and focus group discussions were taken from all participants of the study. To maintain the confidentiality of collected data, anonymity was maintained throughout the research process.

## **Consent for publication**

Not applicable.

## **Availability of data and materials**

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

## **Competing interests**

The authors declare that they have no competing interests.

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## **Authors' contributions**

The authors of this manuscript are MDA, TRM and KDG. MDA is the principal researcher of the study. MDA made a substantial contribution to conceiving and designing the study, and was responsible for overseeing the field work, cleaning the data, analysing the data, interpreting the analysis and drafting the manuscript. TRM and KDG were involved in all stages of research development, and critically reviewed the manuscript. All authors read the final document and approved it. MDA, the corresponding author, submitted the manuscript for publication.

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## Figures

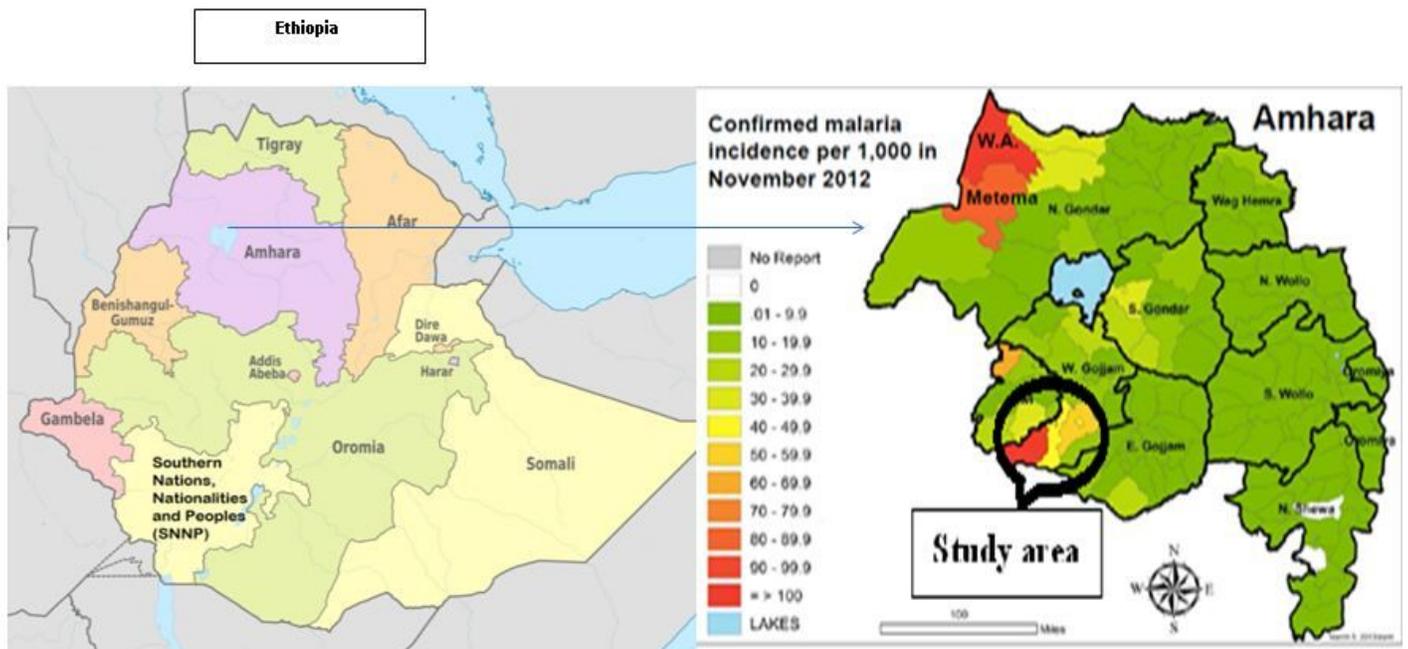


Figure 1

Map of Ethiopia, Amhara Region, study area with distribution of burden of malaria by Woreda [28] The map clearly shows the location of Amhara region in Ethiopia. And it also identifies the selected study four districts. The geo-spatial analysis describe the higher incidence rate in the study area.