

*Original Article***The Perception of Stakeholders towards Services Provided By Primary Health Care in Khartoum State, Sudan**Karimeldin M. A. S<sup>1</sup>, Omer Abdelgadir Elfaki<sup>2</sup>, Sideag A Rahman<sup>3</sup>  
Widad Eldouch<sup>3</sup>**ABSTRACT**

**Background:** Sudan is a signatory country to Alma Ata Declaration and Primary Health Care (PHC) had been established since 1979. Although a lot of improvement is claimed to be achieved in PHC, some of the areas might be still far below the expectations. The objective of this study was to investigate the perception of the PHC stakeholders in Khartoum State about the PHC services provided and the adequacy of facilities used.

**Materials and Methods:** This is a cross-sectional descriptive study conducted in Khartoum State, Sudan, between June and October 2015. A structured questionnaire was administered to a sample of PHC stakeholders. A 3-point Likert scale was used to indicate the quality of the different services provided and the facilities present. SPSS version 20 was used for analysis to calculate relevant descriptive statistical parameters.

**Results:** Vaccination and care for pregnant ladies were perceived by respondents as present and adequate (100% and 95%, respectively). The other services that are perceived as adequate include: child health care, health education, chronic illness, drugs availability and the referral system. In sanitation services and feedback about patients referred to hospitals, only 20% and 4% were satisfied, respectively.

**Conclusion:** Most of the PHC services were perceived as adequate by the respondents from Khartoum State. The services and facilities that were perceived as inadequate include sanitation services, communicable diseases, the referral system and provision of dental services.

**Key words:** primary health care (PHC), stakeholders.

The definition of primary health care as stated by Alama-Ata conference in 1978 is application of PHC in an integrated manner curative wise and preventive wise for the sake of the community<sup>1</sup>. World Health Organization (WHO) define primary health care (PHC) as the first contact with health care that

brings health care as close as possible to where people live and work, evidence based, utilizing appropriate technology, with acceptance and involvement of the community leaders and population. Therefore it appear that PHC involves all aspect of health, life style and the environment surrounding the community<sup>2</sup>. Despite the changes, improvements and development in health, healthcare as a concept remains as it is<sup>3</sup>.

Sudan history in primary health care is dated back to more than sixty years, being a participant and a signatory country of Alama-Ata conferences in 1978. The PHC program has operating in Sudan science that time.

In the era of quality assurance, control, management and improvement a sort of

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evaluation is always needed. Is highly needed. The structures (i.e. manpower and materials), the process and procedure, and the product (outcomes and achievements) are considered very important areas for evaluation<sup>4, 5, 6</sup>. There is no exact definition of quality of health which has multiple dimensions. However, availability of health service in form of good structure (man power and material), the process and procedures of execution the services and the achievement of efficient outcomes can reflect the health quality<sup>7,8,9,10,11</sup>. The component and principle of the primary health care include: 1-mother health 2- health care, 3-community participation, 4-vaccination, 5-care for chronic illness, 6- the referral system to other levels of care, 7-management of communicable diseases and sanitation, 8-prescribing medicine. In order to have effective PHC in Sudan, considerations of establishment of an organizational body to deal with the resources, different procedures and processes so as to achieve good outcomes<sup>12</sup>. The objective of the study was to investigate the perception of the PHC stakeholders about the PHC services provided and the adequacy of facilities used.

**MATERIALS AND METHODS:**

This is a cross-sectional descriptive study conducted in Khartoum State, Sudan between June- October 2015. The population of Khartoum state was more than five millions according to the population census in 2008. 74% of the population were reported to be originally from regions outside Khartoum.

The primary healthcare (PHC) stakeholder targeted include doctors, nurses, midwives, patients and administrators. Non-probability purposive sampling was used to represent all stakeholders.

A questionnaire was designed by the researchers and discussed with some

experts in the field. The items were built on the principles and elements of PHC. The questionnaire was also tested for items clarity and length on a sample representative of all the stakeholders. A 3-point Likert scale was used to indicate the quality of the different services provided and the facilities present.

SPSS version 20 was used for analysis to calculate relevant descriptive statistical parameters i.e. frequencies and percentages.

**Ethical Consideration:**

Written acceptance from MOH, Khartoum State was taken.

**RESULTS:**

Out of 142 stakeholders responded, 38% were doctors, 11.3% were nurses, 20.4% were technicians, 2.1% were administrative staff and 28.2% were patients (Table 1). Almost all respondents perceived vaccination (100%) and care for pregnant ladies (95%) as present and adequate. In sanitation services, only 20% were satisfied. Child health care was

Table 1: Nature of Job of the participants:

Nature of Job (n=142)	Frequency	Percentage
Doctor	54	38
Nurse	16	11.3
Technician	29	20.4
Administrator	3	2.1
Other (patient)	40	28.2
Total	142	100

perceived to be adequate by 88% of the respondents. It was notable that only 4% were satisfied with the feedback about patients referred to hospitals. One of the areas where respondents seemed to be not well satisfied was the communicable diseases services (table 2). More than 70% of the stakeholders responded, perceived the other services as adequate. These include: health education, chronic illness, drugs availability and the referral system. Table 3 shows the satisfaction of the

respondents with the availability of the facilities of the PHCC. Availability of records for pregnant ladies, obstetricians and midwives was perceived as adequate (more than 80%). Only 24% of respondents agreed to the presence of sanitary supervisors. The lowest presence of the health care personnel was for the dentists.

Table 2: Health services provided by the PHCC

PHC services	Number of respondents (%) (n = 142)
PHCC population update	87 (61.3)
Care for pregnant ladies	135 (95.1)
Child health care	125 (88)
Vaccination	141 (99.3)
Sanitation	28 (19.7)
Chronic illness	115 (81)
Communicable diseases	48 (33.8)
Drugs	107 (75.4)
Health Education	113 (79.6)
Referral System	102 (71.8)
Feedback from hospitals	6 (4.2)

**DISCUSSION:**

Satisfaction towards PHC is considered as an evaluative measure for quality of health services. Thus, perceptions of stakeholders about these services is used by policy makers to identify the weaknesses to plan for further improvement<sup>13</sup>. Literature review showed few published work related to quality in PHC in our region. This study addresses the perception of stakeholders about PHC in the biggest State in the country. The results proved that most of the services were perceived as adequate. Few services and facilities were perceived as inadequate and these need to be addressed seriously. There was no discrepancy between the perception for the PHC services studied and the presence and adequacy of the related PHC facilities. We think this consistency might add more value to our results. But, an important

weakness of the study is the limitation to generalize to all the country because of the small sample which is confined to one State.

Table 3: PHCC facilities

Type of PHCC facility	Number of respondents (%) (n=142)
Vaccination	139 (97.9)
Records of population update	94 (66.2)
Records for Pregnant ladies	125 (88)
Record for Referral to tertiary care centers	48 (33.8)
Records for Well baby visits	129 (90.8)
Records for Communicable diseases	116 (81.7)
Medical Officer	112 (78.9)
Pediatrician	94 (66.2)
Obstetrician	116 (81.7)
Family & Community physician	120 (84.5)
Dentist	78 (54.9)
Physician	101 (71.1)
Sanitary supervisor	34 (23.9)
Midwife	126 (88.7)

In EMRO regions many factors that related to interaction with the patient, referral system and other rare dimintions are positively perceived<sup>14</sup>. Some of our findings are consistent with the study done by Shadi *et al* regarding quality of services in primary health care centers in EMRO as well as studies done in Kingdom of Saudi Arabia<sup>13</sup>. Our stakeholder’s perception towards immunization is comparable to Jon Rohde *et al* on reviewing the progress of The Alma-Ata Declaration when he found covering of 100%. Previous studies done in Nigeria showed law perception towards immunization despite some improvement in that countries recently<sup>15,16</sup>. The perception of stakeholder in Sudan as

documented in this study to some extent in agreement with study done in Nepal regarding maternal but not neonatal care. The stakeholder in Nipal has positive perception for the PHC in maternity but negative for delivery and neonatal services<sup>17-19</sup>. The knowledge and perception of the stakeholders in Khartoum state is like that observed by Malawi stakeholders regarding different aspects and level of primary health care (PHC)<sup>20</sup>.

### CONCLUSION:

The results of this study added more evidence that most of the PHC services were perceived by Sudanese stakeholder's in Khartoum state as adequate. Few services and facilities were perceived as inadequate and these need to be addressed seriously. These include sanitation services, communicable diseases, the referral system and provision of dental services.

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