

Accredited or not: Quality of Community Based Health Services sponsored by An International Aid for 20 Years in Six Governorates, Egypt

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Abstract:

Background: Poor and middle income population in Egypt usually prefers community based health facilities as they provide the services in affordable cost. Usually these health facilities are dependant financially on the charity and international fund. The present study focused on selected community based health facilities which are sponsored by an international non governmental organization working in six governorates in Egypt since more than 20 years. **Objectives:** to explore the quality of the provided health services among the observed health facilities. **Methodology:** 48 community based health facilities from six governorates in Egypt were subjected to accreditation tools to evaluate the quality of health services. **Results:** All the studied health facilities didn't meet any of the patient's rights except for family planning counseling. Regarding patient's care it was observed that about 77.5% of the observed health facilities were reasonably met the criteria of quality. It was noted that the criteria of quality of antenatal care were fully met either in the first clinical visit or at the periodic clinical visits in about 83% of the observed health facilities. Regarding hypertension and Diabetes mellitus it was observed that quality was unaccepted in all observed health facilities. It was found that IMCI and family planning were fully met all the criteria of quality in about 85% of the observed health facilities. The environmental safety was partially met the criteria of quality in only about 48% of the observed health facilities. The infection control practices, housekeeping, information management, management of the facility and quality improvement program were not met any of the criteria of quality. **Conclusion:** After 20 years of international fund all the observed health facilities were not meet the full criteria of accreditation of quality of health services. **Recommendation:** Quality assurance should be ensured in community based health facilities funded by international aid.

Background:

Quality health care is a multi-dimensional and multi-faceted concept, based on scientific principles; however, it interacts with value judgments, beliefs and perspectives concerning good or bad quality health care. Quality assurance is defined as: an activity where the primary purpose is to monitor, evaluate or improve the quality of health care delivered by a health care provider (an individual, a service or an organization). Quality assurance should be an integral part of all health care delivery. Terms such as 'peer review', 'quality assurance', 'quality improvement', 'quality activities', 'quality studies' and 'audit' (including all types of audit such as medical, clinical, surgical and record audit), are often used interchangeably (NHMRC, 2003).

Based on the first standards created by the American College of Surgeons, for its "minimum standardization" program in 1917, a "national hospital standardization program" was developed. In 1951 a non-profit organization, denominated "Joint Commission for the Accreditation of Hospitals", was founded with the aim of developing an institutional systematization that would provide quality standards for hospitals. Under this modality, standards and indicators were developed to measure the quality of the services provided within the health care process. Accreditation became one of the pillars for the evaluation of services and it sought to "ensure" the basic conditions required to provide adequate quality care through different operational methodologies. Used as synonyms, total quality management or continuous quality improvement, is probably the most important process developed in the past few years to evaluate and produce quality care. The first experiment at

the national level that applied continuous quality improvement to the health sector was carried out in Boston in 1987, it was concluded that continuous quality improvement has to do mainly with improving the efficiency and therefore the costs. It was thus established, that continuous quality improvement constitutes one of the main tools for competitiveness. The differences between quality assurance (accreditation) and continuous quality improvement have led many authors to refer to accreditation and continuous quality improvement, as the two faces of the same coin. Both processes support each other. As a matter of fact, to initiate a transformation process at the health services level, it is recommendable to begin with accreditation. Once the problems are identified it is more feasible to solve them through the continuous quality improvement process. It is, therefore, ideal to begin an accreditation process simultaneously with a continuous quality improvement process, since both based on the efforts of the other, but, at the same time, the synergy generated by them, enhances the "conviction" that their common objective is quality (Caja, 1998).

In Egypt, the health care services are provided to general population through three sectors; Ministry of Health and Population, private sector and community based health facilities which are linked to community development associations (National Non Governmental Organizations). Poor and middle income population usually prefer the community based health facilities as these health facilities provide the services all over the day in affordable cost. Usually these health facilities are dependant financially on the charity fund and the international fund through the International Non Governmental Organizations working in Egypt. The present study focused on selected community based health facilities which are sponsored by an international non governmental organization. This organization is working in six governorates in Egypt since more than 20 years. The ultimate objective of its health program is to improve the quality of life of deprived children, their families, and communities. The immediate objectives of it's program are to improve the health status of children and to increase their access to health care facilities. It was estimated that the original fund for its health program during the past 20 years was US\$ 40,000,000 (240,000,000 Egyptian pounds). The present study tried to asses the quality of the delivered health services considering that no financial problems impeding the application of quality tools.

Objectives:

General objective:

To improve the quality of the health services provided by community based health facilities in Egypt.

Immediate objective:

To ensure that the provided health services among the observed health facilities were met or not the accreditation tools of quality of health services.

Methodology:

Research setting:

This observational study was conducted within 15 months in 48 community based health facilities linked to Community Development Associations (National Non Governmental Organizations). The health facilities were selected from six governorates in Egypt. These governorates were Cairo, Qalubia, Giza, Behira, Alexandria and Fayoum. The selected health facilities were located in slum areas and rural areas where an international non governmental organization is working to develop the health status of the poor people in these areas by international fund. The selected areas were complaining shortage in the health services as the governmental health centers are either away from them or has shortage in the supplies. Also, these centers are not working all over the day (only morning to afternoon shift) and can't provide the surrounding community with the specialists in different specialties. So, the sick people need to travel outside their village or their slum areas to reach the private specialists. Actually, this is not easy for them as they can't afford the fee for the private specialist and the cost of transportation. So, the working international organization supported the idea of constructing health facilities (health centers) in these areas and supplying them with all needed medical equipments for different specialties under only one condition; the fee of the medical consultation is affordable to the poor people. The management of these health facilities was assigned to the Community Development Associations (CDAs). So, the CDAs start to contract the specialists and manage the facility aiming for sustainability.

Methods:

Observational study passed 3 phases: preparatory phase: during which site of the study, choosing the health facilities, review of literature, preparation of checklist to monitor the quality practices, pilot study and ethical consideration were conducted. Implementation phase: during which monitoring of quality of health services every one month for 12 months, each month the results of the monitoring were sent to the management team of the health facilities with advices on how to improve the quality of the health services. These health facilities were informed that they will subjected to accreditation after one year. So, along 12 months quality surveillance was done with continuous quality improvement. In spite of these health facilities were funded and supported from the working international non governmental organization since many years and still have this fund it is assumed that quality is taking a part from their work. So, the evaluation of the quality of the health services in these health facilities were not the net result of one year work but it was the conclusion of 20 years work. The one year quality surveillance was to alarm these health facilities that quality is going to take place considering that they provide health services in a quality manner as they have the fund and the support from the working international non organization since along time. The accreditation tools covered the areas of patient rights, patient care (general clinical areas, antenatal care, IMCI, family planning, diabetes mellitus, hypertension), environmental safety, clinical safety (sterilization, infection control, employee health program and medicines), supportive services (laboratory, emergency room, radiology), management of information, quality improvement program and management of the facility. The accreditation tools were modified from the criteria of accreditation of quality inside the governmental health facilities in Egypt (MOHP, 2004). These tools were presented in a questionnaire and were used for each

observed health facility. The researchers were the persons who conducted the quality surveillance and the accreditation of the quality of the selected health facilities. Evaluation phase: during which data entry, statistical analysis, results, discussion, conclusion and recommendations were done).

Scoring criteria: the scoring for quality was applied as following (modified from Caja, 1998): Certain criteria were considered to determine if an answer is affirmative (YES) or negative (NO). criteria used to determine if the answer is affirmative (YES) were; Questions must be answered in their whole, without leaving any pending items and in case the person surveyed has doubts concerning any question, it is necessary to make some control questions to back up the score assigned. criteria used to determine if the answer is negative (NO) were: If the answer fails to include all the aspects mentioned in the question, if at the time the questions are asked these are supported by a additional control questions that show that there are no documents to support the answer, or if the control question shows that reality does not support the purpose, the answer will be negative and the surveyor is advised to keep in mind the existing relationship among a number of fields. Scoring by standard is carried out based on the percentage of positive answers from the total number of questions asked for that standard. So, accreditation scores were: Fully implemented ($\geq 75\%$), partially implemented ($>50\%$: 75%), poorly implemented ($>25\%$: 50%) and not implemented (0%: 25%). Finally the services as a whole in the health facility will be accredited if they pass $> 75\%$ of the total items (266 items) of the whole quality items (MOHP, 2004).

Data Collection and statistical analysis: Data entry and statistical analysis were done by using IBM compatible personal computer with the help of Epi info program. Proportion and chi square were the statistical methods used in analysis of data. P value < 0.05 was accepted as a level of significance.

Results:

Table (1): shows that no health facility was fully met criteria of patient's rights among the studied health facilities. 70.8%, 8.3% and 20.9% were not met, poorly met and reasonably met the quality criteria of patient's rights. It was noticed that all the studied health facilities were met the quality criterion (All couples have the right to receive family planning, information and services from the appropriate provider). On the other hand all these health facilities were not met the criterion (The facility provides training related to patient's rights).

Table (2): shows that 77.1%, 14.6% and 8.3% of the studied health facilities were reasonably met, poorly met and not met the criteria of quality of clinical services as regards dealing with cases of diabetes mellitus and hypertension. It was noted that (The requested investigations are performed on time to reach diagnosis) and (The physician has written that patients understood the explanation regarding diagnosis and treatment) were the criteria of quality which were not met in all studied health facility. It was observed that no health facility was fully met all the criteria of quality of patient's care.

Table (3): shows that quality of antenatal care was fully met the criteria of quality in about 83% of the studied health facilities while the rest of the studied health facilities were reasonably met these criteria.

Table (4): shows that about 85% of the studied health facilities were fully met the criteria of quality of antenatal care while about 15% of these health facilities were reasonably met the criteria of quality. It was noted that all health facilities were met the criterion (Menstrual history, obstetric history and history of methods are taken).

Table (5): shows that about 85% of the studied health facilities were fully met the criteria of quality of IMCI services while only 14.6% of these health facilities were reasonably met these criteria.

Table (6): shows that 47.9%, 20.8%, 16.7% and 14.6% of the studied health facilities were reasonably met, poorly met, not met and fully met respectively the quality criteria of environmental safety. It was noted that the following two quality criteria; (The facility has system for proper disposal of waste products including contaminated materials) and (The facility has a preventive and corrective maintenance plan for the building and medical equipment) were not fully met among all the studied health facilities.

Table (7): shows that 52.1 and 47.9% of the studied health facilities were poorly met and not met the quality criteria of clinical safety respectively. It was observed that no health facility neither reasonably met nor fully met the quality criteria of clinical safety.

Table (8): shows that 68.8%, 22.9%, 8.3% and 0.0% of the studied health facilities were not met, poorly met, reasonably met and fully met the quality criteria of supportive services. It was noted that the quality criterion (The radiology services are licensed and supervised by certified technicians) was fully met in all studied health facilities while the quality criterion (The facility has explicit norms and clinical practice guidelines to identify patients who urgently need care, to stabilize patients for referrals and has access to an equipped ambulance) was not met in all studied health facilities.

Table (9): shows that all studied health facilities were poorly met the quality criteria of information management and quality improvement.

Table (10): shows that shows that all studied health facilities were poorly met the quality criteria of quality of management.

Table (11): shows that no health facility among the studied health facilities was accredited as regards quality of health services provided by the studied community based health facilities.

Discussion:

The assessment of quality of community based health services has posed a challenge for improving the efficiency and effectiveness of community based health services. In Egypt, community based health services provide their services to a big portion of the community. This portion meets the low and middle income people who represent majority of people in Egypt. The present study focused on the community based health facilities which funded for 20 years by international non governmental organization (INGO) working in Egypt. The study highlighted that no health facility could be accredited (table 11). This might be attributed to these health facilities concentrate on providing health services without respect to the degree of quality of

these health services. This is because these health facilities lack an overall conceptual framework and didn't establish any objectives for quality assurance (table 9). The studied health facilities paid little attention to patient's rights and their involvement in the development of health care quality (table1). This might be due to the lack of concern towards the satisfaction of the client and stress only on providing the needed health services. This on line with Qatari and Haran, 1999 who reported absence of patient's rights among about 97% of the studied health facilities in Saudi Arabia.

It was noted in the present study that antenatal care services, family planning services and IMCI services among the studied health facilities were met the full criteria of quality in 83.3%, 85.4% and 85.4% respectively, (table 3,4,5) of the studied health facilities. This could be attributed to the availability of all equipments needed for health care of child and mother in these health facilities as these health facilities were supplied by the needed equipments from the international fund. This agree with (Osungbade et al., 2008) who concluded that equipping health care facilities with capacity to provide antenatal care would help to meet the quality criteria of antenatal care. El-Gilany and Aref et al., 2000 in Saudi Arabia reported that about 90% of the studied health facilities were met the full criteria of quality of services of antenatal care.

The present study found that quality of health services provided to patients suffering diabetes mellitus and or hypertension was not met the fully criteria of quality in any of the studied health services (table 2). This might be allocated to absence of clear guideline to treat like these cases and each physician follow the methodology he trust in treatment without paying any attention to the quality assurance of this methodology. This agree with (Al-khaldi and Al-sharif, 2002) in Saudi Arabia who reported that patients with Diabetes were treated with different modalities based on what health center they are treated in and also based on what physician they follow up with. Also it was noted in different studies in Saudi Arabia that patient's care towards diabetes and hypertension was not met the quality criteria (Al-Mustafa and Abularhi, 2003), (Al-Khaldi and Khan, 2000), (Siddiqui and Ogbeide, 2001) and (Al-Khaldi et al., 2002).

The present study found no health facility was met the quality criteria of clinical safety (table 7). This might be a reason of absence of policy and guidelines to control the clinical safety inside these health facilities. This coincide with Cambodia's study which reported that clinical safety inside the studied health facilities was not met any of the quality criteria (Sirenda et.al., 2005). A Chinese study concluded that all studied health facilities were not met the quality criteria and recommended that these health facilities need a problem-based and task-orientated education program to improve clinical safety compliance (Barbara et.al., 2004). Bedair and Michil, 2004 found that improper quality criteria of clinical safety procedures among about 96% of the studied health facilities.

It was found in the present study that there was shortage of resources as regards the quality of supportive services inside the studied health facilities (table 8). This could be attributed to the organizational structure which stress on the availability of the resources without respect to the maintenance of the supportive services which could guarantee the quality of provided clinical services inside the targeted health facilities. This agree with Al-khaldi et al.,2002 who reported that

shortage of resources inside the studied health facilities was one of the organizational factors that make a barrier for quality of supportive clinical services.

It was found in the present study that all the studied health facilities were lack criteria of quality of information management and quality improvement procedures (table 9). This might be allocated to the absence of clear system for keeping records, system for monitoring and evaluation of the provided health services, documented system for quality improvement and an accreditation system for the quality of the provided health services. Also, this could be attributed to the absence of any quality criteria of management inside the studied health facilities (table 10). This coincide with Jarallah and Khoja, 1998 who found several organizational obstacles including poor information systems and poor technology had led to lack of quality of information management inside the studied health facilities.

As seen in (table 10) there was failure in quality of management inside the studied health facilities. This could be explained as; quality improvement can be driven both internally through organized effort within the health care system, and externally through public pressure. Neither internal nor external forces were well formulated among the studied health facilities. This agree with Marshall, 1999 who concluded that Quality improvements should be an integral part of all aspects of primary care, but existing quality improvement strategies inside the studied health facilities are fragmented and uncoordinated.

Conclusion: After 20 years of funding the observed community based health facilities, it was concluded that: no health facility was fully met criteria of patient's rights among the studied health facilities. 77.1%, 14.6% and 8.3% of the studied health facilities were reasonably met, poorly met and not met the criteria of quality of clinical services as regards dealing with cases of diabetes mellitus and hypertension. Quality of antenatal care was fully met the criteria of quality in about 83% of the studied health facilities. 85% of the studied health facilities were fully met the criteria of quality of family planning. 85% of the studied health facilities were fully met the criteria of quality of IMCI services. 47.9%, 20.8%, 16.7% and 14.6% of the studied health facilities were reasonably met, poorly met, not met and fully met respectively the quality criteria of environmental safety. 52.1 and 47.9% of the studied health facilities were poorly met and not met the quality criteria of clinical safety respectively. 68.8%, 22.9%, 8.3% and 0.0% of the studied health facilities were not met, poorly met, reasonably met and fully met the quality criteria of supportive services. all studied health facilities were poorly met the quality criteria of information management and quality improvement. all studied health facilities were poorly met the quality criteria of quality of management. no health facility among the studied health facilities was accredited as regards quality of health services provided by the studied community based health facilities.

Recommendation: Quality assurance should be the cornerstone when the international Aid is going to support the community based health facilities in developing countries.

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Results:

Table (1): Quality of Patient's rights among the studied health facilities

Patient's rights	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
Patients are informed about their treatment and asked for consent for certain procedures (3 items)	14	29.2	19	39.6	9	18.7	6	12.5
The facility has written policies on patient rights (2 items)	48	100.0	0	0.0	0	0.0	0	0.0
The facility has a system to deal with complaints (3items)	23	47.9	5	10.4	11	22.9	9	18.8
The facility has a system to assess patients and provider satisfaction (3items)	48	100.0	0	0.0	0	0.0	0	0.0
The facility provides training related to patient's rights (1item)	48	100.0	0	0.0	0	0.0	0	0.0
All couples have the right to receive family planning, information and services from the appropriate provider (1item)	0	0.0	0	0.0	0	0.0	48	100.0
The facility has a system to ensure that female providers are available, either on site, or through referrals, if requested by client (1item)	23	47.9	8	16.7	7	14.6	10	20.8
Quality of patient's rights (total items=14)	34	70.8	4	8.3	10	20.9	0	0.0

Table (2): Quality of patient's care through clinical services (cases of Diabetes, Hypertension) among the studied health facilities

Patient's care	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
A comprehensive history and physical examination are conducted for all patients (11 items)	34	70.8	5	10.4	7	14.6	2	4.2
The physician explains to all patients the diagnosis and treatment and any follow up needed. (6 items)	0	0.0	5	10.4	11	22.9	32	66.7
The requested investigations are performed on time to reach diagnosis (4 items)	48	100.0	0	0.0	0	0.0	0	0.0
The physician has written that patients understood the explanation regarding diagnosis and treatment (4 items)	48	100.0	0	0.0	0	0.0	0	0.0
Patients requiring care beyond the scope of the services provided at the facility are referred to the appropriate provider (2 item)	11	22.9	16	33.3	18	37.5	3	6.3
All preventive and treatment plans are based on appropriate diagnostic results (6 item)	7	14.6	12	25.0	19	39.6	10	20.8
Quality of patient's care (total items=25)	4	8.3	7	14.6	37	77.1	0	0.0

Table (3): Quality of antenatal care services among the studied health facilities

Number of health facilities=48								
Antenatal care	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
The physician explains to pregnant women about their condition and follow up steps (3 item)	0	0.0	3	6.2	0	0.0	45	93.8
Educational messages covering: nutrition, immunization, personal hygiene, use of drugs, care of breast, delivery process, value of antenatal visits, alarming signs (8 items)	0	0.0	1	2.1	7	14.6	40	83.3
Diagnostic procedures including urine, blood and ultrasound examinations are conducted (3 items)	0	0.0	0	0.0	2	4.2	46	95.8
Total number of antenatal visits are according to WHO recommendation (3 items)	0	0.0	0	0.0	6	12.5	42	87.5
Comprehensive obstetric history and examinations including general and local examinations are done (5 item)	0	0.0	0	0.0	5	10.4	43	89.6
Referral of risk pregnancies to hospital for more care (3 item)	0	0.0	0	0.0	4	8.3	44	91.7
Quality of antenatal care (total items=25)	0	0.0	0	0.0	8	16.7	40	83.3

Table (4): Quality of family planning services among the studied health facilities

Number of health facilities=48								
Family planning	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
Menstrual history, obstetric history and history of methods are taken (3 item)	0	0.0	0	0.0	0	0.0	48	100.0
General and local examination are conducted before advising the method (6 items)	0	0.0	0	0.0	5	10.4	43	89.6
Diagnostic procedures including urine, blood (ABO, RH, CBC, RBG), pregnancy test, ultrasound, papsmear and ultrasound examinations are conducted (5 items)	0	0.0	0	0.0	3	6.3	45	93.7
All treatments are appropriate according to guidelines (3 items)	0	0.0	0	0.0	7	14.6	41	85.4
-the facility has family planning equipments (4 items)	0	0.0	0	0.0	4	8.3	44	91.7
Quality of family planning (total items=17)	0	0.0	0	0.0	7	14.6	41	85.4

Table (5): Quality of IMCI services among the studied health facilities

Number of health facilities=48								
IMCI services	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
A comprehensive history and physical examination is performed for all sick children according to age of the child (9 items)	0	0.0	0	0.0	7	14.6	41	85.4
Diagnostic tests are requested based on IMCI guidelines when needed (4 items)	0	0.0	3	6.3	4	8.3	41	85.4
Appropriate prevention and treatment are provided to all sick children according to IMCI guidelines (3 items)	0	0.0	5	10.4	2	4.2	41	85.4
Children are referred when needed according to IMCI guidelines (1 item)	0	0.0	3	6.3	5	10.4	41	85.4
Quality of IMCI services (total items=17)	0	0.0	0	0.0	7	14.6	41	85.4

Table (6): Quality of environmental safety among the studied health facilities

Environmental safety	Number of health facilities=48							
	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
- The facility has a physical environment that is safe to patients, employees and clients (13 items)	3	6.2	8	16.7	5	10.4	32	66.7
-the facility structure/building and its surrounding grounds are suitable for services provided to patients (11 items)	0	0.0	0	0.0	23	47.9	25	52.1
- the facility has an electric generator with enough power or artificial illumination emergency lights (4 items)	3	6.3	11	22.9	23	47.9	11	22.9
The facility has system for proper disposal of waste products including contaminated materials (8 items)	6	12.5	26	54.2	16	33.3	0	0.0
The facility has a preventive and corrective maintenance plan for the building and medical equipment(7 item)	32	66.7	9	18.7	7	14.6	0	0.0
Quality of environmental safety (total items=43)	8	16.7	10	20.8	23	47.9	7	14.6

Table (7): Quality of clinical safety inside the studied health facilities

Number of health facilities=48								
Clinical safety	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
There is a system for sterilization techniques that is well communicated to all staff (12 items)	6	12.5	11	22.9	18	37.5	13	27.1
The facility has system to reduce risk of nosocomial infections by using Infection Control guideline (10 items)	9	18.8	13	27.1	11	22.9	15	31.2
Review records of cultures taken from delivery room, kitchen and patient rooms (5 items).	48	100.0	0	0.0	0	0.0	0	0.0
The facility has policy for dealing with occupational hazards (3 items)	48	100.0	0	0.0	0	0.0	0	0.0
The facility has a employee health program especially for those who are at risk of infection (9 items).	48	100.0	0	0.0	0	0.0	0	0.0
The facility dispenses drugs in appropriate packaging that includes label of the category of the drug and expired date (3 items)	4	8.3	13	27.1	22	45.8	9	18.8
The patient receives appropriate verbal instructions on the use of the medicines (3 items)	5	10.4	3	6.3	11	22.9	29	60.4
Quality of clinical safety (total items=45)	23	47.9	25	52.1	0	0.0	0	0.0

Table (8): Quality of Supportive services inside the studied health facilities

Number of health facilities=48								
Supportive services	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
The facility has written radiology policy and procedures (3 items)	48	100.0	0	0.0	0	0.0	0	0.0
The radiology services are licensed and supervised by certified technicians (3 items)	0	0.0	0	0.0	0	0.0	48	100.0
For radiology department; there are adequate space, waiting area and changing area (4 items).	13	27.1	17	35.4	18	37.5	0	0.0
Staff of emergency care is present all over the day, they adequately trained in the use of emergency equipments, and emergency kits are available (4 items).	11	22.9	19	39.6	18	37.5	0	0.0
The facility has explicit norms and clinical practice guidelines to identify patients who urgently need care, to stabilize patients for referrals and has access to an equipped ambulance (5 items).	48	100.0	0	0.0	0	0.0	0	0.0
There is a system for housekeeping to ensure that facility is clean at all times(6 items)	3	6.2	9	18.8	23	47.9	13	27.1
There is a standardized process for changing and cleaning of laundry (5 items)	9	18.8	17	35.4	16	33.3	6	12.5
Quality of supportive services (total items= 30)	33	68.8	11	22.9	4	8.3	0	0.0

Table (9): Quality of information management and quality improvement inside the studied health facilities

Information management & quality improvement	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
Informations: -The facility has a system to maintain the accuracy and validity of data and reporting (3 items).	48	100.0	0	0.0	0	0.0	0	0.0
-The facility has complete and accurate medical records (9 items).	39	81.3	9	18.7	0	0.0	0	0.0
-There is system to ensure that patients records are strictly confidential (2 items)	48	100.0	0	0.0	0	0.0	0	0.0
Quality improvement: The facility has a system to monitor and improve the quality of care (6 items).	48	100.0	0	0.0	0	0.0	0	0.0
Quality of information management & quality improvement(items=20	0	0.0	48	100.0	0	0.0	0	0.0

Table (10): Quality of management inside the studied health facilities

Management of the facility	Not met		Poorly met		Reasonably met		Fully met	
	N	%	N	%	N	%	N	%
-The facility has a clear mission statement developed and agreed upon by staff (1 item).	48	100.0	0	0.0	0	0.0	0	0.0
-the facility has a systematic process for planning (3 items).	12	25.0	4	8.3	9	18.8	23	47.9
-the facility has a clear organizational structure with clear lines of authority (1 item).	6	12.5	0	0.0	0	0.0	42	87.5
-a full time director is assigned to manage the facility and he has a clear job description (1 item).	11	22.9	0	0.0	0	0.0	37	77.1
-the facility director has appropriate training in health management (2 items).	44	91.7	0	0.0	0	0.0	4	8.3
-a department head is assigned to each of the administrative and medical departments (1 item).	16	33.3	0	0.0	0	0.0	32	66.7
-there is written job description for all positions in the facility (2 items).	48	100.0	0	0.0	0	0.0	0	0.0
- there is a clear system for communication between the director and the staff (3 items).	23	47.9	13	27.1	12	25.0	0	0.0
-the facility has a fair system to assess employee performance (3 items).	48	100.0	0	0.0	0	0.0	0	0.0
-the facility has adequate number and distribution of staff by specialty (2 items).	21	43.8	27	56.2	0	0.0	0	0.0
-the facility has a program to orient new staff to their work (1 item).	48	100.0	0	0.0	0	0.0	0	0.0
-the facility has a system for continuous education (6 items).	48	100.0	0	0.0	0	0.0	0	0.0
Quality of management (total items= 30)	0	0.0	48	100.0	0	0.0	0	0.0

Table (11): Accreditation status of quality of health services provided by the studied community based health facilities

Accreditation status (Total items (N. = 266))	Number of health facilities = 48	
	N	%
Accredited (> 75%)	0	0.0
Not accredited	48	100.0