Evaluation of Application of Health Area System, in Shendi locality-River Nile State, Sudan. (Sep. 2007 – April, 2010)

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مستخلص الدراسة:

أجريت هذه الدراسة كمسح وصفي اجتماعي (دراسة مقطعية) في سبتمبر 2007 م- أبريل ،2010 م بمحلية شندي، ولاية نهر النيل، السودان.

أخذت عينة بلغت 718 من طبقات مختلفة من المجتمع والخدمات الصحية بالرعاية الصحية الأولية؛ لتقييم تطبيق نظام المنطقة الصحية، ولمعرفة التغطية بخدمات الرعاية الصحية الأولية، كما تهدف الدراسة لتحديد النقص والقصور بتلك الخدمات الصحية، ولقد تم ذلك بواسطة أخذ عينة طبقية من مجتمع الدراسة، ومن ثم أخذ عينة من كل طبقة عن طريق العينة العشوائية البسيطة، و استعملت الاستبيانات، المقابلات، الملاحظة، و مجموعات المناقشة؛ بغرض جمع المعلومات المطلوبة للدراسة.

وجدت الدراسة (8%) من المناطقِ بالمحليةِ لا يوجدَ بها أيّ نوع من الخدمات الصحيةِ، و(77%) من الخدمات الصحية أجرى عليها إشراف منتظم، كما أظهرت الدراسة انعدام خدمات صحة البيئة بمؤسسات الرعاية الصحية الأولية، و(76.8%) من المعوقاتِ التي تُواجهُ نظامَ المنطقة الصحيةَ هي أن الخدمات الصحية لا تُزود

بالإمداد الكافيَ للميزانيات، علاوة على ذلك (31.6%) من العاملين الصحيين يواجهون مشكلةِ عدم وجود تدريب مستمر. و(27.3%) من مجتمع محلية شندي شارك في واحد من البرامج الصحية، بالإضافة لوجود علاقة ذات أهمية إحصائية بين مشارك المجتمع في البرامج الصحية، والعمر للمستفيدين من الخدمات الصحية.

من وجهة نظر مديري إدارات القطاعات ذات الصلة بالصحة أن هناك تنسيق للأنشطة والبرامج الصحية مع قطاع الصحة؛ أما قادة المجتمع فمفهومهم عن (اللامركزية) أنها تفويض وتوزيع للمسئوليات والسلطات، لا يوجد مجلس صحة بالمحلية، و يوجد فريق صحي، ولكن لا يؤدى وظائفه.

خلصت الدراسةَ الحاليةَ بأنّ هناك بَعْض المناطقِ في المحليةِ لا توجدَ بَها خدمات صحية، كما حددت عدداً مِنْ النَقْصِ والقصور في الخدمات الصحيةِ بمحلية شندي. وفي ختام الدراسة أوصت الدراسة النظام الصحي أَنْ يُؤسّسَ الخدمات الصحيةَ بمحلية شندي باستخدام الطرقِ العلميةِ اعتماداً على الدِراساتِ الحقيقيةِ طبقاً لحاجات المجتمع المحلي حتى يُنهض بصحته.

Abstract

An observational cross-sectional community & facility - based study was carried out in Shendi locality-River Nile State, Sudan, in Sep. 2007 - April 2010.

A sample of 718 of different classes from the community and health facilities of primary health care (PHC) in the locality were interviewed to evaluate the application of health area system, &

estimate the coverage by the health services. The sample selected by using stratified sampling, then random simple sampling was used for each class. Structured questionnaires, focus groups discussion, and observation checklists, were used for this purpose to collect the data.

The study shows (8%) of the areas in the locality are without health facilities. (77%) of the health facilities have regular supervision runs on the health services. No environmental health services in the PHC facilities. (76.8%) of the barriers which face the health area system is insufficient supply by allocated budget for the health facilities. Moreover, (31.6%) of the problems which faced the health workers are no intermittent training. (27.3%) of the community participated in health programs. In addition, there is statistical significant relation between community participation in health programs and the age of the users of the health facilities.

Coordination between health sector and health related sector is good. Most of the community leaders define decentralization as delegation & distribution of responsibilities. There is no health council in the locality. Health team in the locality is existing, but without functions.

The current study identified a number of shortages in health services. Health system has to establish health services on scientific way according to the community needs.

Introduction

The aim of health system is health development and to achieve health for all, [1]. Decentralization in health system is needed to give more power to the local health system and to cover people by the health services. The majority of the literature defires decentralization as being the process that transfers both authority and responsibility from the central government to subordinate governments, [2].

Sudan is the largest country in Africa, the large distance and continuous increasing in population need suitable means to develop and aware the community for promoting public health and improving the available health services. In addition, health system in Sudan needs decentralization to allow good coverage by primary health care.

Health in the developing world presented a gloomy picture of health, [3]. Sudan has many problems which faced the health systems. To overcome the above obstacles, come sound of the primary health care system application. In addition a new strategy came, to cover people by the health services of PHC, and that strategy is health area system, which is defined as a health care system set up for delivering primary health care to a population within a well-defined geographical area.

Sudan participated in WHO general assembly in 1973, and committeed the strategy of PHC program in 1976, [4], [2]. Sudan health ministry suggests starting the application of the district health system

in Harare in august 1987, [5], to achieve the decentralization in the health system. In addition, community-based initiatives (CBI) were followed in the locality of Shendi. (CBI) aim to achieve all aspects of development through an integrated approach that utilizes social mobilization and empowerment to guarantee sustainable development for health. CBI strategies introduced include basic development needs (BDN). These (CBI) strategies all pivot around communities playing an active role in improving the quality of life and health of the people, thus ensuring self-sufficiency and subsequently sustainable development, [6]. All that concepts go with the objectives of the millennium development goals (MDGs), which are eight international development goals that all 193 United

Nations member states and at least 23 international organizations have agreed to achieve by the year 2015, [7]. The aim of the Millennium Development Goals (MDGs) is to encourage development by improving social and economic conditions in the world's poorest countries, [8].

Shendi locality is one of the localities of the River Nile state, which has implemented the PHC strategy and adopted the health area system, [9]. Therefore, this study aims to evaluate the application of health area system in Shendi locality.

Methodology

Shendi locality is one of the localities of the River Nile State. It is located north Khartoum the capital of Sudan. The total area of the locality is about 14596 Km2, [10]. The total population of Shendi locality is estimated at about 245000, [11].

Study population of this study are, health facilities in the study area, health workers in the health facilities of HAS, health managers & HAMTs, community leaders, users of health facilities, and managers of health related sectors

The sample size of this study is 718. This sample includes the following:

- The total coverage of the health facilities and health services which were (56).

- The total coverage of the health workers which were (209).

- (30) of the health programs managers in ministry of health of River Nile state in Shendi locality.

- (four) Managers of both Shendi teaching hospital, & Al-Mak Nemir university hospital, (director general and medical manager of each hospital).

- (five) managers of health related sectors.

- (3o) community leaders.

-(384) users of the health facilities from the community.

Astratified sampling technique and random sampling was run to

select (384) users of the health facilities to fill the questionnaires. The formula used is: n = NZ2 S2 / Nd2 + Z2 S2, [12], [13].

Data was collected by the following means: structured questionnaires, structured interviewing with, focus group discussion was done for the community leaders, and observation during visiting was done to health facilities using designed checklists.

Data was analyzed by entering it into computer using the statistical package for social sciences programs (spss), and then results were presented in tables and figures. Chi-square test was used for testing the associations. The level of statistical significance was set at P-value equal to or less than 0.05 for all tests.

Results

Quantitative results

Figure (1): shows the availability of health facilities in the area.

N=61

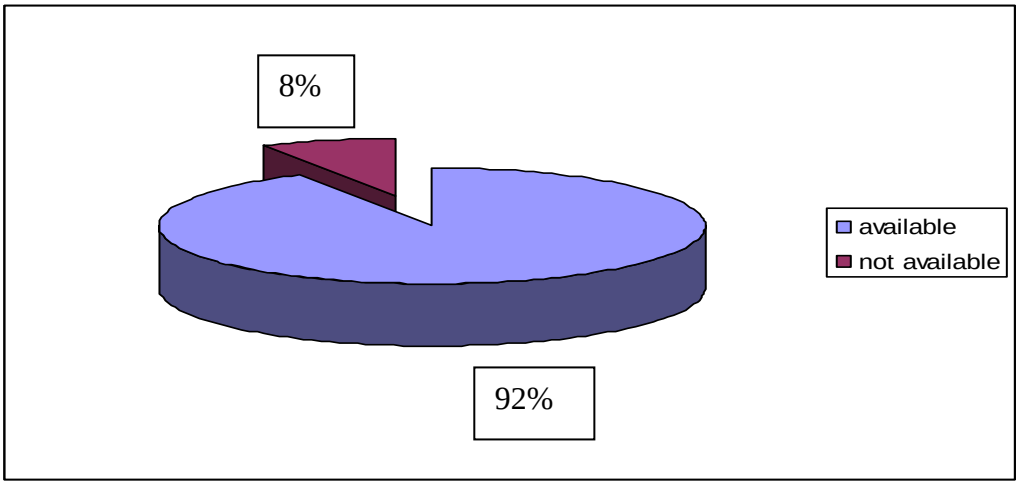

Figure (2): shows the types of the health facilities.

N=56

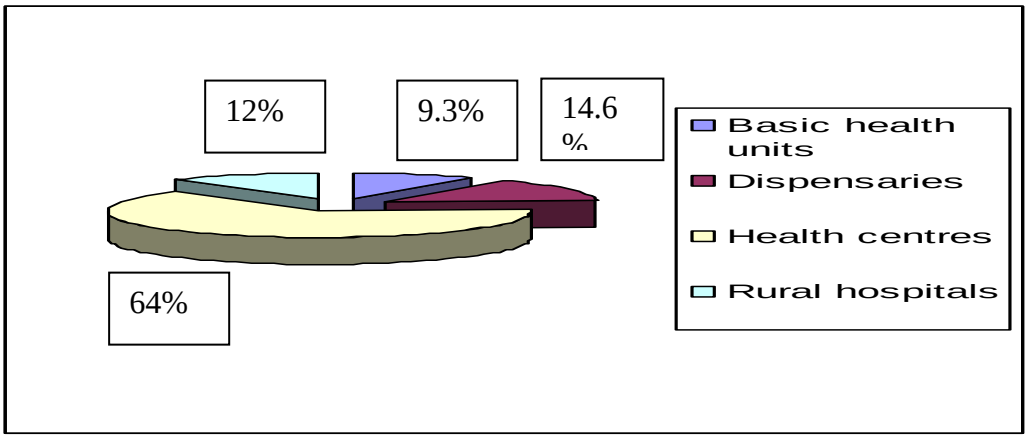

Figure (3): shows the health facilities accessibility, according to users.

N=384

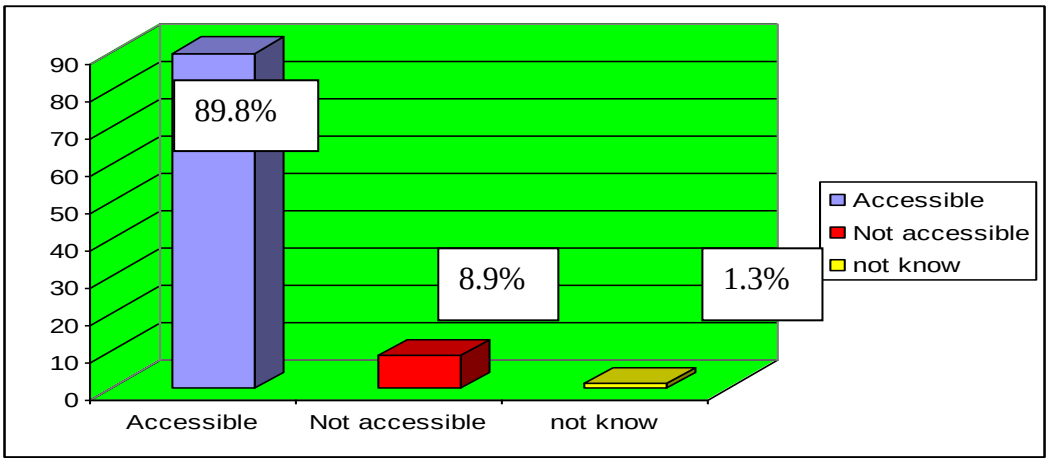

Figure (4): shows the building condition status of the health facilities, according to the observation.

N=56

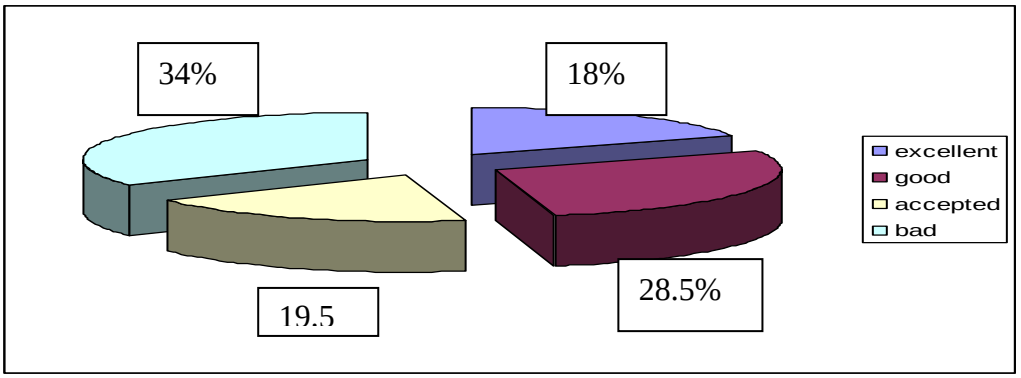

Table (1): shows the supply for the allocated budget to health facilities.

N=56

Variables	Frequency	Percentage
Enough	1	1.8
Intermediat ate	9	16.1
Not enough	43	76.8
Not know	3	5.4
Total	56	100

Figure (5): shows the status of supervision of the health facilities.

N=56

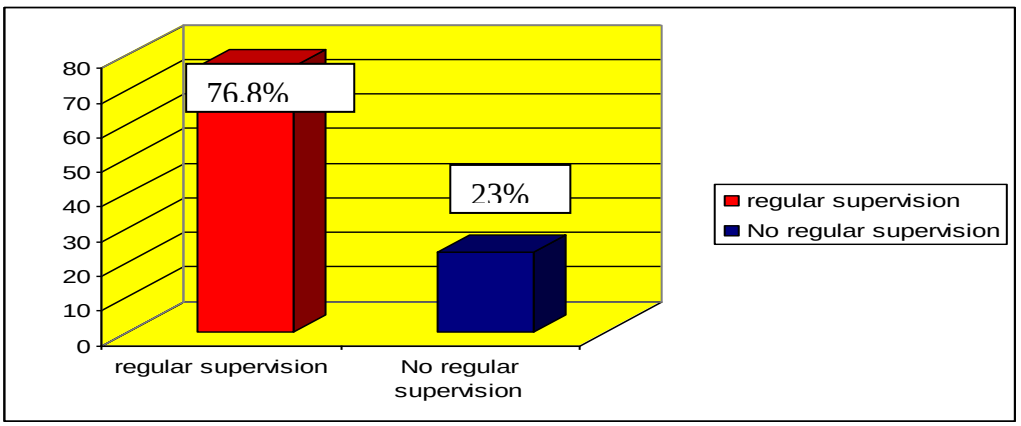

Figure (6): shows the health workers and training courses during their period of work.

N=209

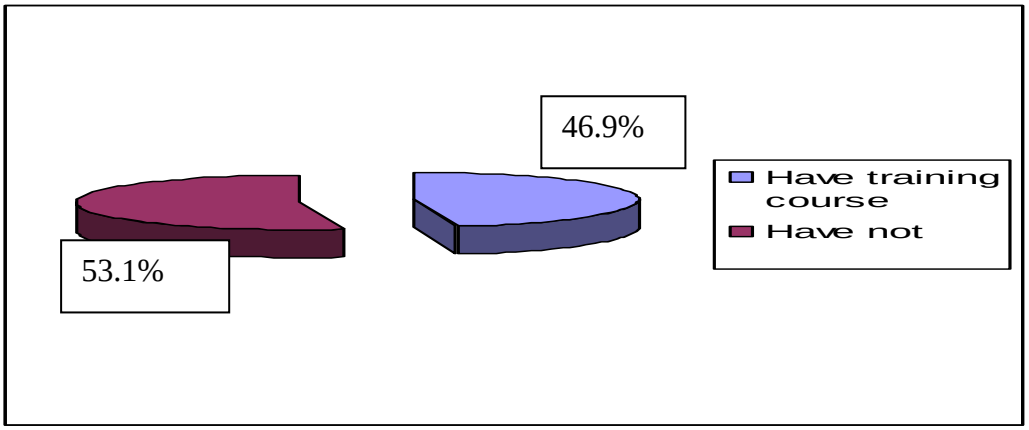

Table (2): shows the status of community leaders participation in health programs.

N=30

Variables	Frequency	Percentage
Participated	17	56.7
Not participatted	13	40.3
Total	30	100

Table (3): shows the status of the community participation and the age.

N=384

Status of participation	Age				total	**P-value**
	Less than 15 years	15-30 years	30-45 years	More than 45 years		
Yes	8	52	27	16	103	0.000
No	2	114	112	53	281	
Total	10	166	139	69	384	

P-value ≤ 0.05

Table (4): shows the barriers in application of the health area system in the locality, according to the health program managers.

Barriers	Frequency	Percentage
No active h health managers	5	16.7
Shortage in equipments	1	3.3
Shortage in manpower	3	10
No continuous training	4	13.4
No enough supply by money	7	23.3
Poor coor rdination	1	3.3
Poor munity participation	2	6.6
No active h ealth managers & lack of continuous training	3	10
Shortage in supply by money, shortage in equipment, & shortage in man power	4	13.4
Total	30	100

N=30

Qualitative results

Focus group discussion of the community leaders

-Most of the community leaders define decentralization, as a distribution of responsibilities.

-Most of the community leaders define health area system, as a cover of people by health services.

- Health system participates with community leaders in planning, implementation and evaluation of the health programs.

- Their assessment of public support of the health facilities is poor.

Interviewing with the managers of Shendi teaching hospital & Al- Mak Nimir university hospital

- The two hospitals, give curative services to the community and PHC services as MCH, and vaccination, in addition to training for medical students & health workers.

Health related sectors

- Most of the managers of the health related sectors think that there is good coordination in implementation of prevention program between their sectors and health sector.

Discussion

The study shows that (8%) of the areas with out any type of health facilities, figure (1), and this agrees with [14], [15], [3], [16], [17], "there is lack of health services in some areas and unnecessary duplication in other". Moreover, health facilities are not accessible for (9%) of the community, figure (3), this result disagrees with, [14], [15], [3], [18], [17], "it envisaged that by the year 2000, at least essential health care should be accessible to all individuals and families in an acceptable and affordable way, with their full participation".

Supply of the allocated budget is not enough and poor for the health facilities, (76.8%), table (1). In addition, the public support is not good as community leaders think, and adequate and stable levels of staffing

and essential supplies need good performance. So state health authorities should encourage all the levels to make maximum use of resources available locally. This result disagrees with, [16], [5], [17], [19].

Conclusion

- (8%) of the areas in the locality with out any type of health facilities.
- There is regular supervision runs on the health facilities, (77%), by the managers of health.
- (76.8%) of the barriers that face the health area system is lack of enough supply for the allocated budget for the health facilities.
- Coordination in implementation of prevention programs between health sector and health related sectors is good.
- Most of the community leaders define decentralization as distribution of responsibilities.

Recommendations

- Managers of health system to distribute equitably, cover people in the locality by the health facilities, & health facilities to be accessible, they have established health facilities on scientific way and on real studies according to the community needs & the size of the population to improve the health of the community.

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