APPLICATION OF DISTRICT TEAM PROBLEM SOLVING APPROACH IN PREVENTION AND CONTROL OF VIRAL HEPATITIS IN IRAQ

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Abstract

District team, problem approach was applied to reduce the impact of viral hepatitis in Sijla village. AL-Farsi district Baghdad/Iraq. Planning, implementation and evaluation was carried out by a health team to solve the problem. Difficulties were reduced and services regarding environmental sanitation and preventive activities were increased both in quantity and quality. then the health impact is assessed using health indicators. The prevalence of hepatitis reduced from 10 per 1000 population before the team work to zero after one year of implementation of the solution plan and the case fatality rate was reduced from 3.2% to zero percent.

(DTPS) activities should receive the top most priorities in preventive health care in Iraq.

Introduction

Historically, two major forms of hepatitis were described based on their means of transmission "Infectious hepatitis" produced large epidemics in various settings and was transmitted by the fecal - oral rout through food, water and person to person contact. It appears that this arm disease entity was primarily caused by the hepatitis A virus (HAV) infection, but may have also included epidemics caused by hepatitis E virus HEV. The injection of medicinal products produced from human lymph or serum resulted in outbreaks of "serum hepatitis" that were primary due to HBV infection but probably also included HCV[1] .

Viral hepatitis E is similar to that of hepatitis A; there is no evidence of a chronic form. The case fatality rate is similar to that of hepatitis A except in pregnant women, where the rate may reach 20% among those infected during the third trimester of pregnant. Epidemic and sporadic cases have been described. Diagnosis depends on clinical and epidemiological features and exclusion of other etiologies of hepatitis[2,3,4].

The District Team Problem Solving (DTPS) constitute a fundamental tool of the Health Information System (HIS)[5]. In this context, senior decision-makers are put in the role of challenging their district staff. Then they must listen actively to their staff s systematically developed solutions. The initiatives and actions discussed are those coming from district staff, they are based on local resources and circumstances. This challenge occurs in a structured planning situation which leads to demonstrable results without additional budget.

The structure of DTPS produces a result-oriented dialogue between MOH staff at a central, regional Ministry of Health and District levels and Facilities. DTPS creates the organizational dynamics required for effective delegation and decentralization of responsibilities.

DTPS produces better health status through improvement in performance of targeted health services, as a result of the initiative, effort and team work of district health personnel, usually in combination with communities they serve[6].

DTPS is a process which takes approximately one year. in which teams of health workers are guided, via two workshops conducting their own analysis of one high priority public health problem, devising and then implementing their own solution to this problem over a one-year period, conducting and presenting the results of their own evaluation of their implementation (progress, constrains, service improvements and health impact), developing the ability to gather and use data and developing good team -work and improved managerial skills[6].

The DTPS approach was initiated in Iraq for the first time in April 1997 in collaboration with WHO[7,8,9].

This study was carried out to demonstrate the DTPS effects on the control of viral hepatitis (type A and E) at the district level.

Materials and Methods

District team problem solving (DTPS) approach was applied to reduce the problem of viral hepatitis especially hepatitis E problem at the village level (Sijla village) in AL-Faris district. In this region the problem is of public health importance because of the high incidence and the very high case fatality rate. Selection of this problem depend own certain indicators for determining prioritization. The cycle of (DTPS) used in this study was 12^{th} months cycle. Multi disciplinary health team was selected from the health care providers servicing the village and the primary health care providers are involved in preventive and curable activities in the district. Data gathering was carried out by the team to identify the main causes of the problem and other relevant in formations were also collected regarding the socio-economic status and the level of awareness of the relatives of the victims and other risk group people.

Planning (DTPS) workshop was conducted which takes 10 days to train the team members how to put a plan of action to solve the problem,which include the suggested solution and the target and objectives stated by the health team and then the implementation schedule as well as the monitoring and evaluation procedures. The team had implemented the plan of action during 12^{th} months, they evaluate their activities to asses the improvement in the preventive services and reduction in the difficulties and then improvement of the health status of the community without additional resources.

Results and Discussion

Viral hepatitis is a serious disease especially among adults and pregnant women.

3 pregnant women were died from the same family in Sijla sub district during the year 1999. To counter this problem the following solutions steps were suggested:

a- provision of safe drinking water by using tankers for distribution of save drinking waters to the households in the remote regions.

b- Improvement in the level of awareness of general public by using all available audio - visual means.

Improvement of existing services was also considered as an important solving by improving the epidemiological surveillance and increment in the coverage rate of hepatitis B vaccination as well as the improvement in the notification of hepatitis cases.

Table (1) shows that most of the activities were implemented at the planned time, table (2) shows the marked reduction in the difficulties facing the team members while table (3) shows the improvement of health services carried out by the health care providers with the support of other sectors to improve the sanitation and increasing the awareness level about the personal hygiene and the importance of

vaccination in protecting human being against viral hepatitis, table (4) shows the marked improvement in the health indicators (morbidity and mortality). There was no case of death because of the disease in the following years. Table (5) shows the futures activities that should be carried out in the future to promote the level of good health activities to improve the health status of the people.

The success story of the health team during implementation is; summarized as follows:

Special emphasis was given to health education activities in the field of prevention of viral hepatitis and the team was succeeded in increasing general health awareness of the public about the disease. Important points like personal hygiene and water purification by adding chlorinating and boiling of water before drinking were stressed.

The district team was able to increase the level of awareness among school children about the importance of water and foods hygiene as a corner stone for prevention of viral hepatitis in their community.

The team also succeeded in improving surveillance, increase the coverage rate of immunization with HB vaccine and ensure early antenatal care registration. The community is aware of the efforts taken by the members of the team The people had participated in the project and supported the pavement of the road linked between their village and the town center, full community involvement lead to establish a primary health care center in the village which improve the health services.

In conclusion (DTPS) should receive top priorities in the health activities planed in Iraq to control and prevent viral hepatitis at the district level.

Table (1) Evaluation of project Implementation

Planned/Unplanned activity	Scheduled completion	Actual completion	Intended product	Intended product
1) Preparation a place for the health team	25/7/2000	25/7/2000	Place is prepared	Proper place for team activities
2) Arrange meeting with governor	1/8/2000	1/8/2000	Understanding the problem and give support	Support gained
3) Monthly meeting with medical staff	5/8/2000	5/8/2000	Increase the capabilities of medical staff	Awareness created
4) Symposium for public health education	1/8/2000	1/8/2000	Increase in the awareness level to the public	Awareness created
5) Reduction in the food and water pollution	15/8/2000	15/8/2000	Provision of safe water supply	Done
6) Provision of tankers for drinking water transport	5/8/2000	5/8/2000	Provision of safe water supply	Availability of safe drinking water
7) Regular provision of chlorine	1/8/2000	1/8/2000	Sterilization of drinking water	Done
8) Follow up of the educational process of PHC visitors	1/9/2000	1/9/2000	Increase the health educational level	Done
9) Training of teachers	1/10/200	16/9/200	Increase in the awareness level of student and their families	Awareness created
10) Improvement of epidemiological surveillance	1/8/200	1/8/2000	Early detection of cases	Done
11) Improvement of the existing campaign	5/8/2000	5/8/2000	Increase the coverage rate of vaccination	Done
12) Improvement in the existing maternal and child health care	1/9/2001	1/9/2001	Decrease maternal mortality rate	Done
13) Arrange for opening new PHC	5/8/2000	5/8/2000	Adequate health services	Phc center opened
14) Opening and paving a street between the village and the town center	Unplanned	1/11/2000	Improve health services	Done
15) Availability of septic tanks	Unplanned	1/8/2000	Reduction of water and food pollution	Done

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Table (2) Evaluation of selected difficulty indicators

No.	Difficulty indicators	Baseline	Target	Achievement
1-	Provision rate of safe drinking water	Zero	75%	75%
2-	Public awareness level	Zero	50%	50%
3-	% of people using chlorine	Zero	100%	85%
4-	Percentage of persons with accepted personal hygiene	15%	50%	50%
5-	Availability of septic tank in the houses	5%	10%	35%
6-	% of people boiling water before drinking	5%	80%	75%

Table (3) Evaluation of selected service indicators

No.	Service indicators	Baseline	Target	Achievement
	% of the availability of health care providers	100%	100 %	100 %
	coverage rate with hepatitis B Vaccination	90%	100 %	100 %
	No. of lectures about viral hepatitis to health care providers	2 / month	4 / month	2 / month
	Coverage rate of vaccinate for children under fives .	92%	95 %	95 %
	Numbers of vaccination campaigns to the high risk groups.	1 / month	1 / month	1 / month
	Coverage rate of vaccinate to the midwifes	30%	100 %	100 %

Table (4) Selected Health Indicators

No.	Health indicators	Baseline	Target	Achievement
	Prevalence of hepatitis	52/1000	10/1000	zero
	Case fatality rate among pregnant women	3.2%	Zero	Zero
	Prevalence rate of hepatitis in AL –Sigla sub district	39/1000	9/1000	zero

Table (5) Future Activity Implementation schedule

Title	Product	Start	Complete	Res officer	Support officer
1) Monthly meeting with medical staff	Increase the capabilities of medical staff	20/8/2001	Monthly	Dr.Haider	Dr. Mohammed
2) Symposium for public health education	Increase in the capabilities of medical staff	25/8/2001	Continuos	Mr. Abdl Mahdi	Mr. Abbas
3) Regular provision of chlorine	Sterilization of drinking water	25/8/2001	Monthly	Mr. Maher	Mr. Ibrahim Malik
4) Improvement of epidemiological surveillance	Early detection of cases	15/8/2001	Continuos	Mr. Mortatha	Dr. Mohammed
5) Improvement of the existing campaign	Increase the coverage rate of vaccination	1/9/2001	Monthly	Mr. Maher	Dr. Thamer Jalal
6) Improvement in the existing maternal and child health care	Decrease maternal mortality rate	1/9/2001	Monthly	Mr. Mohammed	Dr. Arawa

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تطبيق اسلوب حل المشكلات الصحية في الوقاية والسيطرة على التهاب الكبد الفايروسي في العراق

الخلاصة

تم تطبيق اسلوب حل المشكلات من قبل الفريق الصحي لحل وتذليل انتشار التهاب الكبد الفايروسي في قرية مسجلة قضاء الفارس في العراق. تم وضع خطة عمل وتقديمها وقيمها على مدى عام كامل. تم تذليل الصعوبات وتحسين الخدمات العلمية الوقائية وزيادة كفاءة الاصحاح البيئي في القرية ورفع الوعي الصحي للمواطنين وقم تم قياس تحسن الوضع الصحي باستعمال مؤشرات صحية حيث انخفض معدل انتشار المرض في القضاء من ١٠ لكل الف شخص الى صفر بعد عام من تنفيذ العمل وانخفض معدل الاصابة بين المصابين من ٣,٢% الى صفر بالمائة. ان اسلوب حل المشكلات الصحية يجب ان يأخذ الاولوية في الخدمات الصحية الوقائية في العراق.