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Drug Availability and its Utilization in Anganwadis

Vikas Bhatia
Kajesh Kumar
R. Uppal

Primary health care strategy had set the goal of providing low cost, effective and efficient health services by involving paraprofessionals(l). Anganwadi Workers (AWWs) of the Integrated Child Development Scheme have been given the responsibility to provide treatment for common illnesses to pre-school children along with other preventive and promotive services. A medicine kit is provided to them every 6 month *(Appendix)(2).* However, non-availability of drugs is often reported by AWWs, and concern has also been expressed about the possibility of improper drug use by them(3). This study was planned with the objective to find out the availability of drugs in Anganwadis, the knowledge of AWWs about drug usage, and common ailments management by them.

From the Department of Community Medicine, and Pharmacology, Post-graduate Institute of Medical Education and Research, Chandigarh 160 012.

Reprint requests: Dr. Rajesh Kumar, Associate Professor, Department of Community Medicine, Post-graduate Institute of Medical Education and Research, Chandigarh 160 012.

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Material and Methods

Out ofihe 168 anganwadis, 20 were randomly selected for this survey from Raipur Rani Community Health Centre Area, Haryana. The information on drug availability and usage was collected on a pre-tested proforma in the months of July and August, 1990. Medicine kit was checked on the day of the visit to record the number of available drugs. Anganwadi workers were interviewed to find out their knowledge about the drug prescriptions for common diseases and to record the illnesses managed by the in previous 7 days.

Results

Out of the 20 AWWs interviewed, 10 had told that supply of drugs was adequate. On the day of interview paracetamol and co-trimoxazole were available in 12, mebendazole in 11, oral rehydration salts in 8, sulphacetamide and benzyl benzoate in 7,

tetracycline eye ointment in 5, chloroquine in 4, iron and folic acid in 2, and dressing material in 10 anganwadis. Not even a single drug was available in 3 anganwadis while 7 had 1-2 drugs, 4 had 3-5, and 6 had more than 5 drugs.

Thirty seven episodes of illnesses were managed by the AWWs (1.9 episodes per AWW) in 7 days prior to the interview (diarrhea 15, fever 15, bodyache/headache 2, boils 3, cough and colds 1, and pneumonia 1). Knowledge of AWWs about drug prescription is presented in *Table I.*

Nineteen of the 20 AWWs had received pre-service training and 85% of them were working for more than 2 years while 40% had experience of more than 6 years, yet 9 AWWs felt that it was difficult for them to prescribe drugs. Except for one, all of them suggested that training on the drug usage be given to them periodically.

Discussion

Common illnesses like diarrhea and pneumonia are related almost to a quarter to half of the infants and childhood deaths(4-6). Most of these deaths can be prevented by timely and appropriate treatment(7). Since medical care facilities are not available in every village, anganwadi workers who are generally resident of the village are most

TABLE I-*Knowledge of 20 Anganwadi Workers About Drug Usage*

Drugs	Illness for which used.		Dose and duration.	
	Wrong No (%)	Correct No (%)	Wrong No (%)	Correct No (%)
Oral rehydration salts	0	20 (100)	12 (60)	8
Chloroquine	0	20 (100)	8	10 (50)
Iron and folic acid	0	20 (100)	8	12 (60)
Co-trimoxazole	0	19 (95)	-	-
Tablets	-		10 (50)	8
Syrup		-	7	12 (60)
Mebendazole	1	17 (85)	13 (65)	3
Benzyl benzoate	0	17 (85)	13 (65)	5
Vitamin A solution	7	12 (60)	9	11 (55)
Aspirin	12 (60)	8	11 (55)	0
Sulphadimidine	11 (55)	7	16 (80)	0
Paracetamol	13 (65)	6	16 (80)	1

* Don't know responses not presented.

State Health Services provided chloroquine tablets, vitamin A solution and iron andfolic acid tablets. Department of Community Medicine, Post-graduate Institute of Medical Education and Research, Chandigarh provided co-trimoxazole syrup, and oral rehydration salts in the project area. Other drugs were provided by the ICDS project.

suitable primary care workers for provision of treatment for common illnesses such as diarrhea and pneumonia. In the present study, diarrhea and fever were the commonest ailments being managed by AWWs. Similarly diarrhea, cough, fever without rash were also reported to be the commonest illnesses in another study(8).

Drug availability at Anganwadis was inadequate, 15% of them did not have even a single drug on the day of visit. Another disturbing finding was that out of 20 AWWs interviewed, only one could tell correct prescription for paracetamol, all prescriptions for aspirin and sulphadimidine were either incorrect or they did not know the prescription, their knowledge about the diseases for which these drugs are used was also poor *(Table I)*. Although every one had correct knowledge about the diseases for which oral rehydration salts, chloroquine, iron and folic acid was used, dose and/or duration of therapy were incorrect in 12 for oral rehydration salts, in 8 each for chloroquine and iron and folic acid; 19 of them knew that co-trimoxazole is used for pneumonia, dose/duration was incorrect in 10 and 7, respectively for co-trimoxazole tablets and syrup. After the preservice training, most of the AWWs tend to forget drug prescriptions; therefore, continuing training sessions should be organized for them periodically as was desired by most of them in this study. Another alternative could be that decision charts with instruction for dose and duration of drugs may be supplied along with the medicine kit.

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Appendix

Contents of the Medicine Kit Provided to Anganwadis(2)

Name of drug	Form	Quantity
Paracetamol tablet	500 mg	500 tablets
Sulphadimidine tablets	500 mg	450 tablets
Mebendazole tablets	100 mg	450 tablets
Benzyl benzoate lotion	25% emulsion	500ml
Tetracycline eye ointment	3.5 g/tube	10 tubes
Sulphacetamide drops	20% solution	
	14 ml/bottle	6 bottles
Tincture iodine	2% solution	450 ml
Mercurochrome	100 ml/bottle	1 bottle
Cotton	400 g/pack	2 packs
Bandages	5 cm x 5 mt	1 dozen

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Prospect of Splenectomy in Thalassemia

N. Chaudhuri
N. Samanta
S. Bose
C.R. Maity

Thalassemia is one of the most severe genetic defects which presents as a major public health problem in the world population(l). Over 180 million people in the world and around 20 million in India carry the gene for (3-thalassemia(2). Every year about 1 lakh children are born in the world with thalassemia, 5000-7000 of whom are born in India(3) and it is quite likely that a large number of them die even before a diagnosis is mad£. Treatment of thalassemia consists of mainly blood transfusion, chelation therapy and bone marrow transplantation. With the recent introduction of bone marrow transplantation in the management of thalassemia, it is possible to have a cure for this disease and one can hope for a complete cure of the disease in the future by genetic engineering. Regular transfusion is still the only treatment used in the rural hospitals of our country. However, several life threatening complications like iron overloading, hepatitis, hypertension, convulsions, cardiac dysfunctions and renal failure may develop due to multiple transfusions(4-6). Splenectomy is often done to avoid these complications associated with repeated transfusions and to minimize the need and frequency of blood

From the Departments of Pediatrics and Anatomy and Biochemistry, Burdwan Medical College, Burdwan, West Bengal.

Reprint requests: Dr. Nabendu Chaudhuri, Power House Para, Burdwan 713 101, West Bengal.

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