REACHING HEALTH TO THE GRASSROOTS

THE JAN SWASTHYA RAKSHAK SCHEME

OF THE

GOVERNMENT OF MADHYA PRADESH

PEER REVIEW OF JSR MANUAL (SUPPLEMENT)

A PARTICIPATORY INTERACTIVE REVIEW
JULY - DECEMBER, 1997

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CONTENT LIST

JSR REVIEW : A SUPPLEMENT

A PEER REVIEW OF THE JSR MANUAL AND THE SCHEME

Introduction:

As part of the JSR Scheme Review, CHC decided to build up an interactive peer review for the process, so that the experience of the scheme and the evolution of the manual are subjected to a critical review by a host of other 'community based health worker' trainers and a network of trainer peers is identified, who will share ideas, comments and suggestions with the JSR trainers of the Madhya Pradesh Government. This process will increase the cross-fertilization of ideas and there will be an interactive dialogue between qualitative micro-level NGO experience and quantitative macro-level government initiatives like the JSR Scheme. All the peer reviewers were most welcoming of the scheme and from the extent and nature of the comments - compiled in this supplement, it is evident that the manual and the Scheme have been subjected to an enthusiatic and detailed review. We believe that this network of CHW trainers will be very willing to support the Madhya Pradesh government and the JSR scheme organisers in particular, through interactive workshops that will provide support to the further evolution of the manual and the scheme, and in the concurrent and continuing monitoring and evaluation of the JSR Scheme.

SOME COMMENTS ON THE MANUAL

I. **Dr. Shirdi Prasad Tekur, Consultant - Training & Communication, Community Health Cell, Bangalore.**

1. The contents of the Manual are easily understandable to a matriculate, simple in presentation and with no ambiguity.

2. Chapter 1 on Duties of JSR is comprehensive, yet medicalised, with
   * focus on Tb, Leprosy and AIDS;
   * elaborate duties in area of Malaria, Water purification, MCH.

   These are overlapping and duplicating the roles of ANMs and MHWs.
   Some degree of differentiation of activities is required to avoid this duplication and obtain maximum benefits of the different cadres of field workers.

3. Chapter 2 - Health team in community focuses more on disease than on Health (except MCH area). A shift in focus to more health promotive activity is required.

4. The Section - on Anatomy Chapter 3 is more elaborate than required and confusing because of the Latin/English names used. Also the translation/presentation of terms is not accurate, e.g., for SKULL, MANDIBLE, AORTA, and illustration of brain (p.37), section on female genital tract, etc.

5. The above section needs to be revamped thoroughly and presented as HUMAN BIOLOGY including structure and function in a simpler manner.

6. Chapter 4 - presents the Agent - Host - Environment concept well but needs elaboration with examples to make it more understandable. The three levels of Prevention also need to be added to this Chapter and given due emphasis.

7. Chapter 5 - is adequate. Chapters 6 to 8 dealing with Malaria, Tb, Typhoid, Filaria and Dengue
   * offer only medicalized/patient oriented preventive measures
   * have no socio-economic, cultural/other roots of these diseases discussed
   * need elaboration on 'Community Action' for prevention/control.

8. Chapters 9 to 13 are too elaborate and need to focus down to essentials for the JSRs to help them learn their roles/duties adequately and maximally.

9. Chapter 14 - (p115) has a highlighted foot note whose message is contradictory to matter in text. ["ALL CHILDREN less than 2.5 kg need to be seen by a Doctor" - box mentions 2.0 kgs.)

10. Chapter 15 - the presentation/details of dehydration and rehydration are too clinical. Common and noticeable signs of dehydration / rehydration like urination, cry, activity etc., of child also needed to be added. Practical knowledge of home based ORS and that rehydration is 'thirst' based need to be included.

11. Chapters 16 to 19 are elaborate, but good. Some simplification may make it easier to comprehend.

12. Chapters 20 and 21 need to be revamped, helping JSRs understand and utilize traditional and local practices safely for minor ailments and first-aid, utilizing WHO and GOI manuals on these. The 'symptomatic' use of Allopathic, Homeopathic and Ayurvedic medicines can be supplemented with safer, locally available resources.

13. The "Appendix" - Anusuchi -3 on medicines always to be available with JSRs include drugs like Analgin and Decadron which should not be recommended. Also, medicines like Magnesium hydroxide, Benzyl Benzoate, Sulfacetamide drops in text are not mentioned here. The three Homeopathic and three Ayurvedic drugs also do not find any mention in the list. These discrepancies need to be taken care of to avoid confusion and contradictions.

14. The lecture schedules of 145 hours show an unwarranted medicalization, offering 110 hours of Medical College subjects, of which 26 hours of Paediatric and Obstetrics & Gynaecology seem proper.

15. Thirty hours of Community Health and 5 hours on Health Education are inadequate to prepare the JSRs for their roles in the community. National Health Programmes do not find the place in the lecture schedule they deserve, except Malaria, Immunization and MCH. Relevant Sociology subjects are missing from the manual and need to be added.

16. The Disease and Medical Orientation of all the chapters needs to be made Health and Community Activity oriented, bringing in the principles enunciated in Chapter 4 and evolving avenues for practise - to make it a practically useful manual for the JSRs.

II.	Dr. Sham Ashtekar, Bharat Vaidyaka Sanstha, Dindori, Nasik District, -422202. Nasik Ad: Basement 1, Athawale Chambers, 430, J. Tilak Road, Nasik - 422 002.

I personally feel that the scheme must continue and we must try to correct the defects in the best possible manner.

About the manual first. I appreciate the efforts and pains one has to take for preparing manuals like these, in local languages and on a rather uncharted course. I have gone through such pains myself and learnt by making mistakes. So in the first place I would like to thank the person/s before analyzing. I have made similar mistakes myself and have a learnt some more things while preparing the second edition of my book inMarathi. It is not possible in a small space of a letter to write down your comments on a manual of this size and I have something to say about every line of it. But I have tried to make a summary note of my comments in the table here (see enclosures).

In general the manual and the syllabus lacks many things. I am enclosing a list of chapters of my book for health workers. The manual is simply not enough to support professional health workers. Perhaps you could think of manuals course 1 and course 2.

There are some other comments:

* There seems to be no record format for CHWs' clinic records . I am working on such list which I can share later. Unless they keep records of their clinical work, what will the supervision be like?

* The book gives a sense of tentative agenda and lacks a scheme, which must be writ large in the chapters.

* We had listed about 100 essential skills for health workers in the Vachan CDRD study (which need addition). Preparing a handbook for a skills list with photographs/illustrations may be helpful (list is enclosed).

* It is necessary to prepare good test-kit for the CHWs ; for a ready reference kindly see the CHW study (Knowing Health Workers). We have developed MCQs (600), attitude tests, skills list etc. This can be improvised upon.

* What about the legal status for the CHWs using medicines?

* The Madhya Pradesh PHCs have to serve large populations and there is a general lack of enthusiasm for CHWs at that level. The six months training model is expensive and poor on cost-benefit. If it has already been completed there is no point in discussing it. But given a choice, we need to develop distance training

material, interactive training tools at some institutes and short term contact training facilities for skills and attitude training. The training could be staggered with inbuilt evaluation. However urgent the task, the backroom preparations have to be thorough and effective. Otherwise we might waste one more opportunity.

Enclosures:

Appendix 1 : Comments on the Manual
Appendix 2 : A manual for essential Primary Health Care (content list)
Appendix 3a : A feasibility classification of illness
Appendix 3b : A feasibility classification of illness (Hindi version)
Appendix 4 : Two pages from a book on diagnostics (Hindi version)
Appendix 5 : List of medicines from WHO-SEARO meant for Primary Health Care.
Appendix 6 : Information about medicines used in Jabalpur NGO training programme.

Appendix 1 (Comments II)

Comments on the manual

1.	Issue	Comments
2.	Contents	Inadequate. Especially clinical chapters are deficient (see the list of topics of my book) The human biology needs trimming of some areas and addition in certain areas.
3.	Missing sections	Pre-clinical subjects- like how illnesses are caused and how they heal , how medicines work, science of nutrition etc. are hardly discussed. I feel that apart from minor ailments that can be treated by a CHW, there must be something to do in various serious/moderately serious illnesses at the village level. There are atleast 25-30 important illnesses in which CHW has some role- of detecting early ,limiting damage, follow up. There could be a section on what to in such matters. So it will be better to include relavant sections on these illnesses and what is to be done. Detection of hypertension, diabetes, PID, Peptic ulcers, obesity, cancers, mental illnesses, tuberculosis etc must be prominently discussed, not just mentioned. This will give them an important clinical role in the village epidemiology, equipping them against upcoming illnesses. A topic on science of exercise/sports should be included to introduce a culture of physical exercise. There is need to orient CHWs on geriatrics, herbs in health, occupational medicine, village toxicology (first aid) etc.
4.	Technical errors	Some things seem to be wrong or missed in its real meaning, for instance on pp. 109, Pregnancy toxemia is indicated to be an infection (*Sankraman*).
5.	Objectivity	There is a sense of falling between two stools while reading some of the sections.. for instance see p 93. Here the discussion of foreign body reaction is incomprehensible. It makes little ; sense for a reader of this category. A simile would have served the purpose. It confounds the reader with tongue twisting words. In general the objectives of each chapter are ill defined and so the text id not fine tuned to the needs. It overshoots or underserves the purpose of most topics. This fault must be corrected.
6.	Illustrations	Inadequate, needs many more pictures, especially photographs
7.	List of medicines	Needs to be expanded (anusuchi 3) , Information about each medicine has to be included in easy to read format Why not refer to the WHO -SEARO list. (I am sending one I have drafted from this list.). I feel analgin/decadron must have been deleted by now.
8.	Diagnostics	Lacking. Some simple tools of diagnostics are mandatory if they are expected to do clinical work independently.
9.	Language and style	Needs to be rewritten , *Wernerised.* It is little stiff and *sarkari* Cryptic writing is no good for readers who are going to practice as health workers. There are many examples of this. See pp. 75 for instance. In the same paragraph the anatomy of eye (like a camera) and the definition of a camera is together- hence likely to be confused. Separate ideas need separate paragraph. There should be more subheads (stepping stones!) In general it will need a lot of editing , to make it simple and appealing. For instance see, the last sentence on p 93. *..contd on next page*

10.	Use of English words	Too ubiquitous and avoidable . for instance *facial dhamani* should be replaced with *Chehariki Dhamani.* Many words like referral, many anatomical words on pp. 35 could have been replaced by popular usages
11.	Unnecessary sanskritized words	Needs to be minimized- use peoples' language. For instance use *bachha* instead of *shishu* also *jachaki* insted of *prasava.* The penchant to use formal words makes the language lifeless and administrative
12.	Disease description	Inadequate and sketchy. Readers must understand some intricacies rather than 'do as directed' (See typhoid, dengue etc) Another example is AIDS section- which fails to carry any details of the clinical features and gravity of the illness. Such descriptions serve little purpose.
13.	Role of CHWs about illnesses and procedures	There is seems to be some confusion about what the CHW is expected to do about many things. For instance, there should be a clear direction as to which illnesses he/she should treat and what is the responsibility in other problems. (I am enclosing a table to put this issue in some perspective). If this approach is developed properly, many unnecessary details will go away and many vital details will demand inclusion. There seems to be no plan about this.
14.	Orientation of the book to training mechanism	The book has to be tailored to the training needs. If the training is more of a distance learning kind, the books needs to be rewritten that way. If it is meant as classroom companion, a different approach is needed. This book looks like lecture notes and serves neither demand.
15.	Giving statistics	Speak for the village, national statistics is difficult to comprehend. for instance ,see chapter on *Andhatva Niwaran.* How many cataract cases are expected in the village is more important than MP figures.
16.	Treatment of simple illnesses (160-163)	This is a very problematic section. many things are treated simplistically, ear pain for instance.This could be an ASOM as well, which needs different treatment. Same thing about *khansi* . management of this solely depends upon the underlying illness. All this needs to be specified otherwise the CHWs are likely loose ' credibility.
17.	Layout	Monotonous ! needs to be lively and pleasant. Columns would break the text into readable sections. Type size is good but lacks beautification .
18.	Textual errors	Almost every page has some typing error, this needs to be taken care of.
19.	Herbal medicines	Almost absent except one or two places. I understand that govt officers find it difficult to endorse herbs in a govt sponsored scheme. But this must be overcome with a consensus of Govt Vaidyas and other experts.
20.	Good Aspects	The first aid section, child nutrition, domestic cleanliness etc are treated in a better manner than other sections.

A MANUAL FOR ESSENTIAL PRIMARY HEALTH CARE

THIS BOOK IS FOR :

- *Health care workers*
- *Nurses and paramedical workers*
- *Health care trainers and teachers*
- *Health activists*
- *Village doctors*
- *Herbal and traditional healers*
- *Public libraries*
- *All those seeking health information*

FEATURES :

- *Extensive essential information on health and medicine, authored / assisted / edited by subject experts*
- *450 pages of 28 * 20 cms size*
- *About 400 black and white figures & photographs*
- *Color photographs of 50 disease conditions*
- *Diagnostic flow charts for important symptoms like fever, headache, vomiting, loose motions, cough, abdominal pain, chest pain, white discharge etc. .*
- *Diagnostic tables for comparing differential diagnosis for select symptoms*
- *Detailed information about 50 drugs and vaccines used commonly*
- *50 select homeopathic remedies*
- *Useful remedies from Ayurveda and herbs*
- *Essential medicolegal information*
- *Extensive subject index*
- *Guidelines on scope of first contact care*

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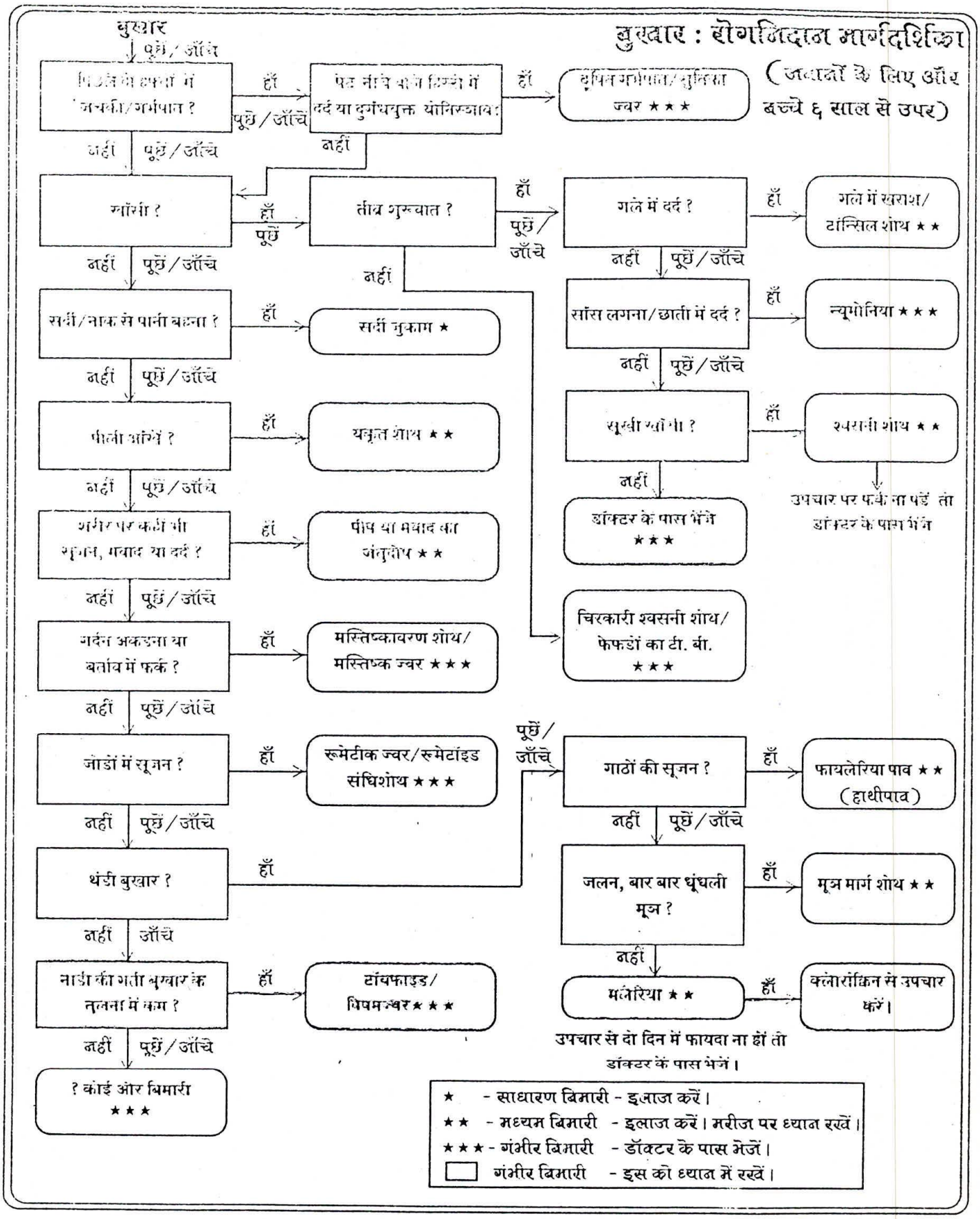
CONTENTS

A Feasibility classification of illnesses-For the Primary Health Care Worker					
Category	**Diagnosis-Easy or less easy**	Treatment-e or less easy	**Risk involved**	**Examples**	**Prevalence in the community**
A) Minor illnesses*	Very simple	Usually simple	None or little	Colds,cuts,simple headaches,	Very common
B)Moderate	Easy	Easy &feasible	Moderate	Dysentry, diarrhoea, sore throat;worms, malaria, Ear infection	Common
C)Acute * serious illnesses**	Complex	May need doctor's help	Risk of morbidity and/or death	Acute respiratory infections@, Cholera, acute abdominal pains like appendicitis, renal stones, meningitis,falciparum malaria, heart attack	Few episodes
D) Chronic serious illnesses***	Complex	Usually needs doctor's help	Long term to health & life	Cancer,filariasis, tuberulosis,high BP, rheumatic fever	Few episodes
E) Accidents * **	Complex	Difficult, only first aid is possible	Lot of risk to health & life	Snake bites,burns, road mishaps, poisoningss,	Not many
* & ** are illnesses PHC workers can and shoulcdmanage, but ** category needs more training & equipment, *** illnesses need referral, possibly with approriate first contact care. Chronic illnesses need follow up from PHC workers, which is very important. PHC workers have some role in all the categories. Some conditions like ARI -marked @- PHC workers have managed successfully on their own.-it is possible and is very significant.					

बिमारियों का वर्गीकरण

बिमारी का प्रकार	रोगनिदान कितना आसान है ?	उपचार कितना आसान है ?	सुरक्षितता (खतरा)	समाज में बिमारी का प्रमाण	बिमारियाँ
साधारन बिमारी ★	++++ बहुत आसान	++++ बहुत आसान	++++ खतरा नहीं	++++ बहुत जादा	सर्दी - जुकाम, खरोच, कट जाना, सरदर्द, कब्ज, अपचन, जंत कृमि बिमारियाँ शरीर दर्द, फंगल बिमारी, स्केबीज, आँखो की बिमारी आदि.
मध्यम बिमारी ★★	+++ मध्यम	+++ मध्यम	+++ मध्यम	+++ मध्यम	आँखों की बिमारी, कान की बिमारी, गलाशोथ, टॉन्सिल शोथ, दस्त रोग, पीलीया, खसरा, छोटी माता, यकृत शोथ, दातों का दर्द, मुँह में छाले, कमजोरी, थंडी बुखार, रक्तहीनता, पोलिओ आदि.
तीव्र (अचानक) गंभीर बिमारी ★★★	++ थोडा मुश्किल	++ थोडा आसान	++ कम	++ कम	न्यूमोनियाँ, मस्तिष्क की सूजन, पोलिओ, लिंग संसर्ग बिमारियाँ, जोडों में दर्द, आमाशय व्रण, मूत्रसंस्था में कंकर, मूत्रसंस्था शोथ, झटके, टायफाईड, गर्भावस्था सम्बंधित बिमारियाँ आदि
दीर्घ कालीन गंभीर बिमारी ★★★	++ थोडा मुश्किल	++ कम आसान	++ कम	++ कम	टी. बी., कुष्ठरोग, सभी प्रकार के कॅन्सर, रूमेटॉईड ज्वर, अतिरक्तदाब, मधुमेह, हाथीपाव, कमजोरी, मोतियाँ बिंदु, गलगंड आदि
अपघात ★★★	+ मुश्किल	+ मुश्किल	0 नहीं	+ बहुत कम	अन्न विषबाधा, सर्पदंश, बिछू का काटना, अपघात से चोट आना, बहुत जल जाना, डूबना आदि

★ - इलाज करें - इलाज करें।
★★ - मध्यम बिमारी - इलाज करें। मरीज पर ध्यान रखें।
★★★ - गंभीर बिमारी - डॉक्टर के पास भेजें।


बुखार : रोगनिदान मार्गदर्शिका
(जवानों के लिए और बच्चे ६ साल से उपर)
बुखार
पूछें / जाँचें
पिछले एक सप्ताह में जच्चगी/गर्भपात ?
हाँ
पूछें / जाँचें
पेट नीचे वाले हिस्से में दर्द या दुर्गंधयुक्त योनिस्राव ?
हाँ
दूषित गर्भपात/सुतिका ज्वर ★★★
नहीं
पूछें / जाँचें
खाँसी ?
हाँ
पूछें
तीव्र शुरुवात ?
हाँ
पूछें / जाँचें
गले में दर्द ?
हाँ
गले में खराश/ टांन्सिल शोथ ★★
नहीं
पूछें / जाँचें
सर्दी/नाक से पानी बहना ?
हाँ
सर्दी जुकाम ★
नहीं
पूछें / जाँचें
सांस लगना/छाती में दर्द ?
हाँ
न्यूमोनिया ★★★
नहीं
पूछें / जाँचें
पीली आँखें ?
हाँ
यकृत शोथ ★★
नहीं
पूछें / जाँचें
सूखी खाँसी ?
हाँ
श्वसनी शोथ ★★
उपचार पर फर्क ना पड़ें तो डॉक्टर के पास भेजें
नहीं
डॉक्टर के पास भेजें ★★★
शरीर पर कहीं भी सूजन, गुमड़ या दर्द ?
हाँ
पीप या मवाद का जंतुरोप ★★
नहीं
पूछें / जाँचें
गर्दन अकड़ना या बताव में फर्क ?
हाँ
मस्तिष्कावरण शोथ/ मस्तिष्क ज्वर ★★★
नहीं
पूछें / जाँचें
चिरकारी श्वसनी शोथ/ फेफड़ों का टी. बी. ★★★
जोड़ों में सूजन ?
हाँ
रूमेटीक ज्वर/रूमेटॉइड संधिशोथ ★★★
नहीं
पूछें / जाँचें
पूछें / जाँचें
गाठों की सूजन ?
हाँ
फायलेरिया पाव ★★ (हाथीपाव)
नहीं
पूछें / जाँचें
थंडी बुखार ?
हाँ
जलन, बार बार धूंधली मूत्र ?
हाँ
मूत्र मार्ग शोथ ★★
नहीं
जाँचें
नाड़ी की गती बुखार के तुलना में कम ?
हाँ
टॉयफाइड/ विषमज्वर ★★★
नहीं
पूछें / जाँचें
मलेरिया ★★
हाँ
क्लोरोक्विन से उपचार करें।
उपचार से दो दिन में फायदा ना हों तो डॉक्टर के पास भेजें।
? कोई और बिमारी ★★★
★ - साधारण बिमारी - इलाज करें।
★★ - मध्यम बिमारी - इलाज करें। मरीज पर ध्यान रखें।
★★★ - गंभीर बिमारी - डॉक्टर के पास भेजें।
गंभीर बिमारी - इस को ध्यान में रखें।

बुखार रोगनिदान तक्ता (बच्चों के लिए - १-५ साल तक)

खाँसी	नाक से पानी बहना	पतले दस्त	उल्टी	झटके	बिमारी की विशेषता	रोगनिदान
	ह		क		नाक से स्त्राव, लाल आँखे, हल्का बुखार	सर्दी - खाँसी ★
व	क	क	व	क	निगलते में कठिनाई, टॉन्सिल, गलाशोथ, सूखी खाँसी, गलघोंटू? टॉन्सिल/गले में कोई दाग ?	गले में / टॉन्सिल में शोथ ★★
ह	क	क	क	क	पहिले सूखी खाँसी, बाद में बलगमयुक्त खाँसी	श्वसनी शोथ ★★
ब	क	क	क	क	५०/मि. से अधिक साँस लेना (> ६०/मि.- ६ माह से कम आयु में), तेज बुखार, छाती में गड्ढा, साँस में आवाज - गंभीर बिमारी	न्यूमोनिया ★★★
व					हल्का बुखार, भूख और वजन में कम होना	फेफड़ों का टी.बी. ★★★
ब		ब	व		सूखी खाँसी, काफी दिनों से हल्का बुखार, मल में कृमि	कृमि खाँसी ★★
द	ह	क	क	क	खसरा/शरीर पर लाल दाने निकल आना, छोटी माता में जलयुक्त फुन्सीया (छोटी माता की खासियत)	खसरा / छोटी माता ★★
		क	ह	ब	कान दर्द - बडें बच्चों में कान का पर्दा फटना, मवाद बाहर आना (अक्सर खाँसी-जुकाम के बाद)	कान में संक्रमण ★★
		क	ह	व	गर्दन अकडना, बर्ताव में फर्क, बोलने में फर्क, सिर में अति दबाव से मगज फूलना	मस्तिष्कावरण शोथ / मस्तिष्क ज्वर ★★★
		क	ब	क	पीली आँखें, ठीक से खाना न खाना, पेट में हल्का सा दर्द	यकृत शोथ ★★★
		ब	क	क	पेट में हल्का दर्द, तेज बुखार	विषम ज्वर (टायफाइड) ★★★
		ब	क		पेट दर्द (मरोड), दस्त में रक्त, श्लेष्मा	जीवाणू (बॅक्टेरिया) की पेचिश ★★
		ब	ब		दस्त में छोटे बडें कृमि निकलना	कृमि विकार ★★
क	क				जोडों का जगह बदलता दर्द, दिल का धडकना, हृदय की जगह दर्द	रूमेटीक संधि शोथ ★★★
		ब,--		ब	दस्त रोग के बाद बुखार और अंगघात, जादातर स्नायू में इंजेक्शन के बाद	पोलिओ ★★★
			क	क	शरीर में कहीं मवाद/जंतू जत्व दोष के लिए जाँच करें	पीप / संक्रमण ★★
क		क	क	क	कम जादा होनेवाला बुखार, प्रतिदिन, हर दूसरे दिन	मलेरिया ★
					गाठों में सूजन (रक्त की जाँच करें)	हाथीपाव / फायलेरीयलपाव ★★
				क	गर्मियों में बच्चों में हमेशा (१ साल से कम आयु में)	गर्मी - बुखार ★★
ब		क	क	क	मसूडों से खून, गाठों की सूजन, बार बार बिमार होना	रक्त का कॅन्सर ★★★

ह - हमेशा ब - बहुत बार ★ - साधारण बिमारी - इलाज करें। ★★★ - गंभीर बिमारी - डॉक्टर के पास भेजें।
क - कभी कभार द - देर समय पर दिखनेवाला ★★ - मध्यम बिमारी - इलाज करें। मरीज पर ध्यान रखें। □ - गंभीर बिमारी - इस को ध्यान में रखें।

Appendix - 5 (Comments II)

Drugs for primary health Workers			
List No	Category	Name of Medicine	Remarks
1.	Local anaesthetic	Injection Xylocaine	Only for wound suturing & scorpion bite
2.	NS Anti Inflammatory	Asprin tablets ,also dispersible.	Pain killer, fever-reducing
3.		Ibuprofen tab & syrup	Pain killer, anti inflammatory
4.		Paracetamol	releif of fever, pain
5.	Anti-allergic medicines	Chlorpheniramine (also Cetrizine), tablets , CPM injection	Anti-histaminic (for itch, allergic skin rash etc)
6.		Adrenaline injection	Allergic
7.	Anti Helminthic agents	Mebenda/albendazole ,tab/syrup	Broad spectrum medicine for worms
8.		Praziquantel tab/syrup	Tape worms
9.		Diethyl carbamazine tab,syrup	Filariasis
10.	Anti bacterials	Amoxicillin oral	Broad spectrum
11.		Furazolidine oral	Bacterial gut infections
12.		Phenoxy-methyl-penicillin (oral)	URT bacterial infections,pyodermas
13.		Trimethoprim- Sulfa-Oral	Broad Spectrum anti bacterial, LRTI,UT
14.		Doxycycline tab/cap	Some STDs,URTI
15.	Anti-protozoal	Chloroquine ,oral	As in Malaria Control Programme
16.		Primaquine tab	do
17.		Metronidazole tab/pessaries	do
18.		Tinidazole tab	do
19.	Anti angial	Glyceril Trinitrate-sublingual#	Anti-anginal
20.	Skin medicines-(Ext)	Miconazole	Fungal dermatoses
21.		Whitfield ointment	do
22.		Gention violet susp	anti-infective
23.		Neomycin+Bacitracin	do
24.		Providone Iodine	do
25.		Gamma BHC, Benzyl benzoate	Scabies, louse
26.	Disinfectants	Chlorhexidine sol	External application
27.		Hydrogen Peroxide	do
28.	Eye applications	Gentamicin & antibacterial drops	Anti-bacterial
29.		Tetracycline ointment	do
30.	Digestive System drugs	Magnesium/Aluminium salts	Antacid
31.		Metoclopramide oral	Anti emetic
32.		Promethazine oral	do
33.		Dicyclomine	do
34.		Magnesium Sulfate	do
35.		Anti-Hmorrohidal ointment	Piles
36.		Oral rehydration salts	Rehydration
37.	Drugs used in asthama	Aminophylline oral/	Asthama
38.		Salbutamol oral/ inhalation	do, also as uterine stimulant
39.	Anti-tussives	Codeine tab/linctus	To suppress dry cough
40.	Vitamins & Minerals	Vit D	Ricketts/Osteomalacia
41.		Vit A	Prevention/Treatment of def blindness
42.		Vit B complex	Various specific indications
43.		Vit C	Scurvy
44.		Calcium oral	
45.		Ferrous salt oral (with folic acid)	As curative and preventive for anemia
46.	Urinary Analgesic	Pyrimidine tab	In dysuric burning pain

G-1 : गॅमा लोशीन

मूल्य : १ आदमी के लिये २ रु.
उपयोग : खुजली (सुरखी), जुएँ
विधी : स्नान के बाद तौलिया के प्रयोग से चमडी सुरवायें, बाद में चेहरा छोडकर सब बदन पर दवा लगायें, अगले दिन यही प्रयोग करें.
कपडे व बिस्तर धूपमें सुरवायें। सब घरवालों को एकही साथ लगायें।

G-2 : जेंशन

मूल्य : ५० पै, प्रति व्यक्ती
उपयोग : जरव्म, फोडे, घाव आदि, स्त्रीयोंमें योनि दाह।
विधी : कपास का प्रयोग करें. इससे दाग लगते हैं, एक, दो दिन बाद फिर प्रयोग करें।

I : Iron / Ferrous (लोह) 200mg.

मूल्य : ५ पै 5 P
उपयोग : शरीर में लोहधातु की पूर्ती के लिये, खासकर महिलाओं के लिये।
विधी : १ गोली दिन में दो बार, सौ दिन। (- वयस्क)
सूचना : ① बच्चों के लिये पतली दवा मिलती है।
- गोली भोजन के साथ लें
- खाली पेट लेने से पेट में जलन हो सकती है।
- इससे टट्टी काली होती है, कोई डर नहीं।
- गर्भवती और दूध पिलानेवाली महिलाओं को अवश्य दें।

W : व्हीटफील्ड मलम

मूल्य : १ ट्युब ५ रु. Rs 11.00
उपयोग : दाद के लिये
विधी : साफ करने के बाद चमडी पर लगायें। दिन में २ बार.
ठीक होने के बाद भी 2-3 दिन लगायें।

Y : Eye Drops.

मूल्य : १ ट्युब ५ रु. Rs 9.80
उपयोग : आँख आने पर
विधी : दिन में ८-१० बार बूँद डालें। हर २-३ घंटे बाद प्रयोग करे

N : चमडी मलम

Rs 8.00
मूल्य : १ ट्युब ४ रु.
उपयोग : घाले, घाव आदि
विधी : बाहरी प्रयोग के लिये।
लगाकर पट्टी करें।

• [illegible] कोझाल

मूल्य : ४० पै   50 P

उपयोग : ये दवा जंतु विरोधी है।
खून की पेचिश, चमडी पर छाले, मवाद, फोडे, फुन्सी, न्युमोनिया, कान फूटना,
मुत्रमार्ग में संक्रमण, साइनस सुजन।

विधी : वयस्कों : २ गोली, दिनमें २ बार, ५-७ दिन
बच्चों : ६ माह - १ व : एक चौथाई गो, २ बार, ५ दिन
१ व - ३ व : आधी गो, २ बार, ५ दिन।
४ व - ८ व : एक गो, २ बार, ५ दिन।
९ - १३ व : डेढ गो, २ बार, ५ दिन।

सूचना : इसके साथ खूब पानी पियें।
गुर्देकी खराबी हो तो न दें (पेशाब कम होना)
इसके प्रयोग के बाद मुँहमें छाले होने की संभावना है, ऐसे हो तो प्रयोग बंद करें।

O : ORS (जलसंजयिनी)

मूल्य : डेढ रु   3.50 P

उपयोग : दस्त में निर्जलन होना, हैजा, उष्माघात होना आदि।

विधी : वयस्को : १ लिटर पानी में मिलाकर बार-बार पिलायें।
बच्चोंमें : १ लिटर पानी में मिलाकर थोडा-थोडा चमचसे पिलाते रहे। उतना ही सादा पानी बीच-बीच में पिलायें।
बच्चों के लिये आधा पाकिट आधे लिटर पानी में तैयार करें, खतम होने पर फिर बनायें।

S : सालमाल (सालबुटामाल) 2 mg

मूल्य : १० पै   15 P

उपयोग : दमा, श्वसनालिकाओंको खोलता है

विधी : वयस्क : १ गो दिन में ३-४ बार, ५-७ दिन तक
बच्चों : डॉक्टर के सलाह अनुसार

सूचना : सुरक्षित दवा, असर न होने पर दुसरी दवा प्रयोग करना ठीक रहेगा, इसके लिये डॉक्टर के पास भेजे।

M : मेट्रोनिडाजोल (Metronidazole) 200mg.

मूल्य : 20 पै। 30 f

उपयोग : अमीबा, गार्डिया। आदि के विरुद्ध
अमीबा - पेचिश;
बच्चों में होनेवाली हरी - झागवाली दस्त रोग।
स्त्रियों - पुरुषोंमें फैलने वाली। एक यौन बीमारी इससे ठीक होती है।

विधी : वयस्को : 2 गोली, 3-4 बार दिन में .... 5-7 दिन तक
यौन बिमारी के लिये - सिर्फ 1 दिन।

बच्चों : 1-3 व : आधी गोली दिन में 3-4 बार
4-8 व : एक गोली दिन में 3-4 बार
9-12 व : एक + आधी गोली - 3-4 बार

सूचना : खाना खाने के तुरंत बाद प्रयोग करे।
यह दवा बहुत कडवी है, इससे जी मितलाना, उलटी, सरदर्द, मुँह में लोहेकी कची आना आदि तकलीफ होती है।
शराब पीना हो / पी हो तो ये दवा न लें।

Q : क्लोरोक्वीन : 250mg.

मूल्य : 40 पै 60 f

उपयोग : मलेरिया बुखार के लिये.

विधी : शुरुमें एकदम 4 गो एकसाथ ; छः घंटोके बाद - 2 गोली एकसाथ
दूसरा और तिसरा दिन : 1 गो सुबह, 1 शामको.

बच्चों में : समय का क्रम उसी तरह, सिर्फ मात्रा कम.
1-4 व : 1 गो प्रथम, आधी बादमें, एक-चौथाई दो बार।
5-8 व : 2 प्रथम, एक बादमें, आधी दो बार।
9-12 व : 3 प्रथम, डेढ बादमें; आधी दो बार।
(पूरा इलाज तीन दिनों का)

सूचना : यह दवा काफी कडवी होती है।
खाना के साथही प्रयोग करे।
पेट में तकलीफ होती है, तो साथ में अँटासिड - चलायें।
इस दवा के कारण पेटमें जलन, जी मितलाना, उलटी हो सकती है।

B : बेंडाझोल (Albendazole) 400mg

मूल्य : २ रु 2 रु

उपयोग : आँतोंमें कृमी होना।

विधी : सब उम्रके लिये एकही मात्रा : रातको १ गोली चबाकर खायें।
दूसरे दिन कृमी गिरते हैं। ३ हफ्ते बाद एक बार फिर प्रयोग करें।

सूचना : गर्भवती महिलाओंको न दें।

C : सीपीएम (CPM) 4mg.

मूल्य : १० पैसे 10 P

उपयोग : सभी प्रकारकी खुजलन कम करनेके लिये। (लेकिन मूल बीमारी का इलाज अलग करके) खुजली, दाद, अॅलर्जी, कीडे-काटना, सर्दी-जुकाम अॅलर्जीक हो तो भी इसका प्रयोग करे।

विधी : वयस्को : १ गोली दिनमें 1-2 बार
बच्चों : १ से ५ वर्ष : एक चौथाई हिस्सा } दिन में 2 बार
६ से ८ वर्ष : आधा हिस्सा }

सूचना :- मूल बिमारी का इलाज भी करे।
- इस गोली से नींद आती है, इसलीये सिर्फ रातमें देना उचित होगा। वाहन चालक इसको काम के समय न लें।

D : डायमिन (Dicyclomine)

मूल्य : १० P 20 P

उपयोग : पेट मे मरोडनेवाला दर्द कम करने के लिये। पेचिश, कृमी, पथरी, अलसर, आदि दर्द कम करता है।

विधी : १ गोली 2-3 बार दिन में।

सूचना :- पाँच बरस से छोटे बच्चों में टालना उचित होगा।
- इससे मूल बीमारी नही, केवल दर्द ठीक होता है।
- इससे दर्द न रुके तो डॉक्टर के पास भेजे।

F : फ्युराडिन (Furazolidine) 100mg

मूल्य : २० पै 20 P

उपयोग : यह एक जीवाणू विरोधी दवा है। जीवाणू-पेचिश-दस्त में उपयुक्त।

विधी : वयस्कों : १ गो दिन में ४ बार ... ५ दिन के लिये।
बच्चों : १ व - ३ व : आधी गोली 3-४ हिस्सोंमें बाँटकर दिनभर देतेना।
४ व - ८ व : १ गोली ४ हिस्सोंमें बाँटकर देतेना।
९ व - १२ व : आधी गोली ४ बार दिन में।

सूचना : यह दवा सिर्फ दस्त के लिये उपयुक्त है।
इससे पेशाब पीली रंग की होती है, लेकिन कोई डर नहीं।

आरोग्य साथी प्रशिक्षण : दवाओं की जानकारी

A-1 : ऑस्पीरिन (300mg गोली)

मूल्य : 10 P (प्रतिगोली) 10 ₹

उपयोग : सरदर्द, बदनदर्द, पीठदर्द, बुखार, माहवारी-दर्द, गोचा, दर्दनाक-सूजन

डोस : वयस्को : 1-2 गो, दिनमें तीन बार ; 3-5 दिनोंके लिये

बच्चों में : उपयोग न करें

गर्भवती : उपयोग न करें

सूचना : यह गोली खाली पेट न दे, इसके कारण जलन होती है। खाना खाने के साथ ही गोली दें।

पेट में जलन या अल्सर हो तो प्रयोग न करें।

दमा हो तो प्रयोग न करें।

खून बहने की कोई प्रवृत्ती हो तो प्रयोग न करें।

गोली से पेट में जलन पैदा हो तो दूध या अॅन्टासिड गोली ले।

A-2 : पेमाल (500mg गोली)

मूल्य : 10 P मात्र 2-5 ₹

उपयोग : सिवाय दर्दनाक सूजन के, सब उपयोग ऑस्पीरिन के समान है : सरदर्द, बुखार, पीठ दर्द, मोच, माहवारी-दर्द आदि।

डोस : वयस्को : 1 या 2 गोली दिनमें 3-4 बार दें।

प्रसंगवश : 1 या 3-5 दिन तक

बच्चों में : 6 माह से 1 वर्ष तक : छटा हिस्सा तीन बार

1 वर्ष से 3 वर्ष तक : तिसरा हिस्सा - 3 बार

4 व से 6 व तक : आधा हिस्सा - 3 बार

8 व से 12 व तक : दो-तिहाई हिस्सा - 3 बार

(बच्चों में पतली दवा देना सुलभ है)

सूचना : सुरक्षित दवा ; बच्चों और गर्भवती महिलाओंके लिये भी ठीक।

A-3 : अॅन्टासिड (आमलता विरोधी) (500mg गोली)

मूल्य : 10 पैसे 10 ₹

उपयोग : पेट (आमाशय) की जलन कम करता है।

अलसर का दर्द भी कम करता है।

विधी : जलन महसूस होने पर 1-2 गोली चबाकर खायें, दिन में 4-8 बार ले सकते हैं।

सूचना : बच्चों को देना जरूरी नहीं।

जलनकी बारबार तकलीफ हो तो स्वास्थ्य केंद्र भेजे।

III. Dr. Abhay Shukla, Pune, Maharashtra.

Comments on 'Jan Swasthya Rakshak Manual'

- Dr. Abhay Shukla

General comments on the manual

The launching of a state-wide village health worker programme in todays context is definitely a commendable step taken by the Govt. of M.P.. That the training of these health workers (Jan Swasthya Rakshaks) would be full time for a period of six months is a further positive feature as it would enable the JSRs to tackle a wide range of health related problems in their communities and continue to function effectively in the future.

The given manual needs to be evaluated in this context, as to what extent it would enable each JSR to acquire a range of understanding and skills to carry out various health activities in her/his community.

It must be admitted that seen in the context of this overall scenario, the manual falls far short of expectations and suffers from many deficiencies at every level, quite a few of a serious nature. Before going into detailed comments on selected chapters, let us make some general comments:

A. Approach to the role of the JSR

Such a manual would be expected to have a decisive influence in defining the role of the JSR and shaping the attitudes of thousands of future JSRs. What comes across is that the JSR is a peripheral govt. functionary whose main job is to implement govt. health and F.P. programmes and to keep records. Caring for the sick is a very low priority and awareness generation on health issues or articulating the needs of one's community related to health issues is not even mentioned. The section on working in the community never mentions anything about trying to understand the priorities of people vis a vis health or the problems they face with the Govt. health infrastructure.

In the tradition of our educational system, there is a lot of emphasis on acquiring (largely abstract and often irrelevant) *knowledge*, very little emphasis on practical *skills* and not even an attempt to deal with *attitudes*.

To some extent the blind spots of the manual can be traced to this totally 'tunnel vision', top-down approach.

B. Approach to health and disease

The entire approach to understanding health and disease is extremely piecemeal and superficial. One repeatedly gets the impression that the JSR is just supposed to follow set procedures or take ad hoc measures rather than creatively thinking to make diagnoses, identifying health problems in his/her village or understanding disease in either an individual or community. Thus even the understanding of the human body and disease laid out in the book suffers from serious deficiencies:

*There is not even a mention of basic concepts like infection, immunity, inflammation which are essential for an elementary understanding of disease.

*Categories of micro-organisms are mentioned (e.g. viruses, bacteria) without ever describing what they are, how they are seen, etc. Such a simple and practically relevant concept like: by and large bacterial diseases can be treated by anti-microbials whereas common viral diseases cannot; is never mentioned.

*The concept that the body is made up of cells, a foundation of human biology, is not mentioned anywhere in the book.

*The entire concept of a distinction between a symptom and a disease is never made, which is the basis of making a diagnosis, even at an elementary level. Thus the concept of diagnosis hardly appears in the book.
*The fact that much disease is caused by social conditions and factors is never dealt with systematically; where environmental causes are mentioned it is in a largely victim-blaming and condescending fashion (e.g. chapter 5).

C.Structure of the book - major omissions

Generally the structure of the book is somewhat disjointed and there is extremely uneven level of detail regarding various topics. Nowhere have clear learning objectives been defined , so often much material is given without clearly defining its relevance (esp. anatomy etc.). Topics not falling in the pigeonholes of Govt. activities tend to get left out. The following chapters/sections should be added-
*A chapter on basic concepts of health and disease (concepts mentioned above)
*A chapter on basic pharmacology and some details about commonly used medications; some description of non-allopathic systems and home remedies
*A chapter on the Public Health System: The staff and their functions at least at PHC and Subcentre levels, and some overall idea about National Health Programmes.
*A more detailed chapter on basic epidemiology, linking it with preventive strategies and describing in some detail environmental and social causation of disease. (The present chapter is exactly 2 pages).
*A chapter/section on clinical methods including points in history taking relevant to various cardinal symptoms; how to actually do simple physical examinations; the relevance of findings; and how to reach a diagnosis when dealing with a patient presenting with any of the major symptoms (e.g. fever, cough, pain abdomen etc.).
*A section very briefly describing serious illnesses not covered in other chapters enabling the JSR to detect such conditions in time and promptly refer them (e.g. meningitis, cerebral malaria, intestinal obstruction,appendicitis, perforation, ectopic pregnancy etc.); a comprehensive list of danger symptoms/signs which would indicate *urgent* referral.
*A glossary with all the technical terms used in the book explained in clear Hindi.

D.Presentation, language and coherence

On this score, there is tremendous scope for improvement, to put it mildly. All except the first two chapters are very poorly organised, and there is no clear sequence of section numbers, headings/subheadings in almost all chapters. Ideally each chapter should start with learning objectives and then a brief introduction (neither the book itself nor any of the chapters have introductions presently). There should be a clear style of headings, subheadings and section headings and consistently followed numbering. The chapter could end with a brief summary and description of key new terms introduced.
The language fluctuates between sanskritised, overtly technical Hindi and technical English transliterated into Devnagari (often erroneously) . There are attempts to use simpler Hindi also, but because of the uneven style the overall effect is not easily understandable in many places.
Diagrams have either been borrowed without adaptation (or acknowledgement) from English books or are originals. In either case, the labelling and quality can definitely be improved. Many of the diagrams do not have explanatory captions.

Comments on specific chapters:

It is not possible to go into details of all the chapters. Comments have been given on six chapters by way of illustration.

Chapter I

*No mention of the special relevance and role of the JSR as a community health worker; her/his appropriateness, accessibility, affordability, non-exploitative and demystificatory role, relationship with people of the community etc. Role is described like a typical govt. employee, a totally top-down, straitjacketed and uninspiring role description. The JSR appears as the lowest rung of Govt. health service rather than a front-line person involved in promoting health in her/his community.

1.`Swasthya Dal...':
No mention of attempting to understand local health priorities, health problems prevalent in one's community.
No mention of any kind of demand generation or getting suggestions or feedback from the community on health issues.

2.`Sanchari Rogon...':
The JSR is supposed to inform the HW(M) *after* an epidemic has taken place, but there is no mention of vigilance regarding any increase in number of cases which may alert one to the possibility of an epidemic at an early stage.

3`Malaria..'
All cases of fever, even those who obviously have common cold, purulent skin infections, diarrhea etc. to be considered malaria?
What about simple community measures like eliminating stagnant water collections?

5.'Tikakaran'
No mention of follow up of vaccinated children for minor sequelae (e.g. fever) or alertness regarding incidence of EPI diseases (which may be due to either low coverage or vaccine failure).

6.`Garbhavati...'
Is the JSR supposed to do routine Antenatal checkups of all women in the village? Is this not the role of the HW(F) ?

8.`Poshan'
Mentions detection of malnourished children but does not say what specifically is to be done for them esp. severely malnourished children (e.g. supplementary nutrition). Only a general mention of`education of mothers regarding nutrition'; bypasses the crucial socio-economic factors responsible for malnutrition.

9.'Parivar Niyojan'
No mention of infertility.

11.'Durghatnaon...'
No mention of road accidents, fall from heights(e.g. trees), agricultural implement injuries, scorpion bite etc.

12.'Choti moti bimariyon...'
There is no mention of questioning and examining the patient, and making a diagnosis. Apparently treatment is to be made on an ad hoc, symptomatic basis. The list of problems is a jumble of symptoms (e.g. fever) and diseases (e.g. ulcer); cough and cold are combined as if they always occur together.
No mention of common problems like pyoderma, infected wounds, sore throat/tonsillitis, amoebic dysentery etc. One wonders if the JSR is expected to treat 'ulcer' - presumably peptic ulcer.

Some general omissions regarding role of the JSR as mentioned in the chapter:
*There is no mention of awareness building in the community regarding irrational medical practices and the need to avoid them (e.g. unnecessary injections and infusions);
* absolutely no mention of local and traditional remedies;
* no mention of combating socially harmful health-related misconceptions e.g. relating to infertility, menstrual taboos, causation of male vs. female child;
*no mention of how drug supplies will be obtained and dispensed and maintenance of drug-related records.

The language is often unnecessarily difficult and at times even erroneous due to attempts at literal translations. For example, certain substitutions could make the text more comprehensible and factually accurate .

Examples of language modifications suggested in Chapter 1.

Page	Existing	Suggested
1	पूर्व सावधानियाँ बरतें	रोकथाम की कार्यवाही करें
1	बुखार के रोगियों को पहिचानें	बुखार के रोगी कौन हैं इसका पता रखें
2	मौलिक उपचार	आमूल उपचार
2	नियमित समय के बाद	नियमित रूप से
3	समझाइश	सलाह
4	ग्राम के लक्ष्य दम्पतियों की अद्यतन सूची	गाँव में फिलहाल जिन दम्पतियों को परिवार नियोजन की जरूरत है, उनकी सूची
5	निर्धारित प्रक्रियाओं से काम लें	बताए गए तरीकों से देखभाल करें
5	विकारों	बीमारियों
5	अतिसार	दस्त

Chapter 3

General comments:
There is not even a sentence of introduction before launching into a disjointed, chaotic, jargonised collection of largely irrelevant facts regarding mostly human anatomy. It is not at all clear as to how this knowledge relates, if at all, to the work of the Jan Swasthya Rakshak.
There is no mention of the fact that the body is divided into systems which perform specialised functions . A term used in some places is संस्थान which literally means institute ! The correct term would have been संस्था.
There is absolutely no mention of the microarchitecture of the body. There is no mention of the fact that the body is constituted of cells, anywhere in the book!
There is emphasis on giving excessive detail in technical english transliterated into devnagari regarding anatomy, but for some reason physiology is not discussed in equal detail or related to anatomy. No attempt has been made to place this information in context of either clinical settings or simple, commonsense knowledge about the body which the trainee may already have.
Specific comments:
*There is description of *types* of muscles etc. without decribing their basic function to begin with. There is no mention that muscles and bones together are responsible for locomotion.
*Towards the end of describing the skeleton, there is suddenly a description of the skull, chest and abdomen, including a sketchy description of circulatory and digestive systems which is anyway described in detail again, later. Not clear what is the context or utility.
*There is a rather detailed description of carbohydrate metabolism as part of functions of liver which abounds in biochemical terms - neither necessary nor comprehensible.
*On p.27, suddenly there is a second section on skin without any context which just lists the components of layers e.g. स्क्रब्टम मेल्यूलोशन , इनवात्युएंटरी म्यूसल फाइबर without any explanation - utility is not at all clear.
*The section on the heart gives excess detail of structure but is not corroborated by the diagram which is hardly labelled. There are one and half pages of details about major arteries and veins which do not appear relevant and is hardly comprehensible without a diagram.
*Section 6 (starting p.32) is titled 'Organs of the reproductive system' but deals only with the *male* reproductive system ! Female reproductive organs are dealt with in the next section. Even if unintentional it is factually misleading.
*The section on 'Female reproductive organs' does not describe the menstrual cycle, the concept of hormonal changes, process of fertilisation, very simple concepts about pregnancy - only some terms are mentioned haphazardly.
*The section on Nervous system gives no description of simple phenomena like sensation, nervous control of voluntary movement etc. - there is just a listing of functions (presumably of the nervous system) which is not very illuminating.
*There is no section on the endocrine system.

The entire chapter abounds in confusing terms and statements which even become laughable at times, e.g:
ऐच्छिक ... ये मांसपेशियां त्वचा के अन्दर पायी जाती हैं
(Literally means that voluntary muscles are found inside the skin).
-'ऊपर का अंग ऊपर लिम्ब ' - much simpler would have been कंधा और बांह
पेल्विस , गुहिका , नोल्स , खोखली नली
आमाशय यह पेट मे रखता है
(This statement is confusing because the words for stomach and abdomen in Hindi are the same - पेट)
सेगमेन्टेशन मूवमेन्ट इलियो कोलिके जंक्शन
यकृत इसका वजन मनुष्यों में 1.4 से 1.6 k.g. व स्त्रियों में 1.2 से 1.4 k.g. होता है.
(Literally means that liver weighs 1.4 to 1.6 k.g in humans and 1.2 to 1.4 k.g. in women!!)
श्वसन नली यह गले से निकलकर पांचवी वर्टीब्रा के अन्दर तक जाती है
श्वसन संस्थान ... यह रक्त के दौडने मे मदद करता है.
श्वास छोडना आखिर मे सभी मांसपेशियां फैल जाती है अतः फेफडों पर उनका दबाव पडता है...
(Literally means that all the muscles relax and thus exert pressure on the lungs!)
गुर्द - should be गुर्दा
मूत्र करने क्रिया को मूत्र करना कहते हैं
(Literally means that the process of urination is called urination!)
टेम्पोरल सिर के किनारों को रक्त देती है.
स्पायनल कार्ड .... इसमे से 31 जोडे स्पायनल नाडी के निकलते हैं बाकी बची जगह मे C.S.F. भरा रहता है.

The diagrams are of variable quality, and the labelling is usually a combination of Hindi and English terms which is confusing. Many systems appear hanging in the air giving no notion of where they are located in the body. Important omissions are: a simple overall diagram of the body showing the location of all important organs; a diagram schematically showing the lungs and heart together and process of O2/CO2 exchange; a diagram of the circulatory system showing major blood vessels; and a diagram of the nervous system in entirety showing spinal cord and nerves(schematically).
In the middle of the description of the ovary, there is a diagram of an oval organ without any labels. On careful inspection it is revealed to be not the ovary but the brain turned sideways!

Chapter 4

There is no introduction to the subject or background regarding relevance of the subject.
The epidemiological triad is introduced with the Agent being equated with disease organisms - no possibility of toxins etc. The terms रोगाणु and जीवाणु are used interchangeably whereas the former means micro-organism and the latter means bacteria. Virus, bacteria, protozoa are mentioned repeatedly without a word of explanation.
The term for host अतिथेय is quite incomprehensible - शरीर or मेजबान would be better.
Environment is supposed to include the internal body environment - is this conceptually correct?
There is no example of how modification of each of these three factors could lead to changes in occurrence of disease.
There is an overgeneralised description of disease transmission and it appears as if all types of microbes enter and exit the body via all routes and are transmitted by all vectors.

There is no notion of the specificity of mode of transmission of each disease. It would have been better to give some specific examples like infective diarrhea, malaria, common cold.
In the table of diseases by mode of transmission, there is no mention of vector borne diseases at all.
There is absolutely no mention of the *Social context* in causation of disease; the fact that many diseases are related to inadequate nutrition and poor living/working conditions and that improvement in social conditions has been much more instrumental in communicable disease control than just medical measures.
All in all the treatment of the subject of epidemiology is very cursory and is disposed off in two pages. No attempt has been made to relate it to preventive measures which are the subject of the next chapter.

Chapter 6

While introducing the subject there is no mention of - the basic fact of malaria being a vector borne disease, a basic outline of the life cycle of the parasite, its significance as a public health problem etc.
While describing the fever there is no mention of the periodicity of fever and its episodic nature (of course it should be mentioned that these features are not always present). There is no mention of enlargement of spleen as one of the clinical features of chronic malaria.
मोटी और पतली रक्त फिल्में बनाना ?
The presumptive treatment suggested is only 4 tablets of chloroquine for an adult which is acknowledged to be insufficient by NMEP in endemic areas and should be changed to total 10 tablets.
The radical treatment suggested also does not mention full dose of chloroquine and dose schedule of Primaquine mentioned seems to be same for both P.Vivax and P. Falciparum.
There is no description of the significance of vivax vs. falciparum (possibility of relapse in the former, chloroquine resistance and cerebral malaria in the latter).
The occurrence of relapses and possibility of chloroquine resistance (both now common in endemic areas) are not mentioned at all.
Cerebral malaria and its features are not mentioned at all.

Chapter 19

This chapter mainly consists of an extremely detailed protocol of physical examination, which one presumes is to be applied to all patients without discrimination.
There is no mention of the distinction between symptom and disease (e.g. fever vs. malaria) nor sign versus disease (e.g. jaundice vs. hepatitis). Thus there is no clarity on how to approach a diagnosis and the entire description of physical examination does not seem to lead anywhere.
History taking is dispensed of in a few lines (paradoxically under the heading - points for examination). There is no concept of presenting or major complaint nor special points to be enquired regarding particular complaints (e.g. cough, pain abdomen).
The protocol for physical examination runs into two and a half pages without any demarcation into systems or prioritisation based on the patients presentation.

There is absolutely no description on *how* to go about conducting any of the examinations e.g. of the throat, chest, abdomen .The JSR is just instructed to examine tonsils, thyroid, liver, spleen, lungs etc. without a clue of how to do this. The text is unencumbered by any explanatory diagrams.
Taking of pulse is repeated at **three different places** in the protocol ! On the other hand simple points like examining the tongue for pallor, palpation of the abdomen for tender areas, pedal edema are not mentioned. The significance of any abnormality in the all-important pulse, is never mentioned so it appears to be just a magical ritual to be followed for its own sake! In fact there is no guideline on interpreting any of the findings arrived at after the detailed rigmarole of examination.
The chapter ends with a pedantic instruction to give more importance to detailed history taking than to physical examination. This is unfortunately contradicted by the authors themselves who devote exactly two lines to points to be enquired in history and devote two and a half pages to physical examination.

Chapter 20

The entire subject of clinical medicine for the JSR seems to be treated as the lowest priority even though it may be a high priority for both the community and the JSR. This is reflected in devoting just 6 pages to treatment of minor ailments whereas anatomy/ physiology runs into 22 pages and record keeping into 17 pages!
As has been remarked earlier, there is no attempt to inculcate the practice of making a diagnosis, nor has the relevant information required for this been provided. There is a totally 'cookbook' approach of 'for this - do this' which is not only grossly inadequate but also instills irrational treatment practices from the very inception of training.
There is a mixture of allopathic, ayurvedic, homeopathic and home remedies advised but none of these modes of treatment, let alone their integration, has been discussed anywhere ~~in the book~~.
Despite the previous detailed description of anatomy, there is no attempt to deal with diseases system-wise which would make it somewhat more logical. The reason for the particular ordering of ailments is obscure till one realises that the table is translated from an (english) alphabetically listed table of simple ailments starting with abscess and constipation and going upto vomiting and worms!
In fact there is no description of any of the diseases mentioned - which is the affected organ/system, what is the derangement, natural history, basis of treatment, complications etc. For a six-month full time course this seems to be grossly inadequate clinical information. There is no mention of many common problems like sore throat/tonsillitis, amoebic dysentery, pyoderma, infected wounds, trachoma, simple dysmenorrhea etc.
The scanty and disjointed information given is also confusing and at times incorrect:

Topic	Remarks
Abscess	No mention of the need to drain an abscess
Constipation	No mention of natural laxatives like milk, high fibre cereals. Fluid intake is necessary but why advise only *hot* water ?
ઝેર means cramps here probably intend to mean convulsions	No mention of the commonest cause - febrile convulsion
Cough and cold	To combine the two as a single entity is itself erroneous - they should have been dealt with separately. What is the utility of applying menthol on the back? Giving chilis? No mention of rapid breathing as a danger sign
Earache	Is sulfacetamide an appropriate treatment for ASOM? Should all cases of earache with fever be referred?
Fever	All cases including colds, diarrhea, abscesses, measles etc. to be given chloroquine? Is 36 degree centigrade the cutoff point? No mention of the need to reduce blankets/covering and keep the room well ventilated
Headache	Should all pregnant women with a headache be referred?
Indigestion	The term is itself confusing and means different things to different people.What is the utility of Magnesium hydroxide unless there is acidity? (it can itself aggravate diarrhea).What is the special utility of boiled water?
Joint pains	Either aspirin or paracetamol can be given for symptomatic relief.
Pain in abdomen	Why Magnesium hydroxide for all cases of pain abdomen - many cases related to diarrhea will get aggravated by it. The dosage schedule for homeopathic drugs is not clearly given.
No.11	The disease itself is not mentioned (?Ringworm)
Scabies	No mention of Gamma Benzene Hexachloride. No mention of washing clothes in hot water
Sore eyes	Covering the eye with a pad for ordinary conjunctivitis is erroneous and could also be dangerous
Ulcer	The term is confusing as this word is usually used to denote peptic ulcer in lay language. Which antiseptic ointment is referred to and what is its utility?
Vomiting	Should all cases of diarrhea with vomiting be referred? In most cases the vomiting is self limited. Why Magnesium Hydroxide again especially since most cases are due to gastroenteritis?
Worms	There are safe, highly effective and inexpensive allopathic treatments available e.g.Mebendazole, Albendazole - why not advise these?

Comments on the List of medications to be used by the JSR:(Appendix 3)

1.This list does not contain most drugs recommended in Chapter 20 (whether correctly recommended there or not) :

Magnesium Hydroxide tab., Menthol, Eucalyptus oil,Sulfacetamide eye/ear drops, Lashunadi Vati, Mahayograj guggulu, Coloi 6 (?), Mag Phos 6, Benzoic Salicylic oint., Benzyl Benzoate lotion, Terramycin eye oint.,Belladona 30, Mercsol 30, Antiseptic oint, Cyana 30 etc.

2.This list does not contain certain basic medications which can be quite useful for treating a range of ailments e.g. Metronidazole, Aspirin/Ibuprofen, Mebendazole, Vit. A, Gentian Violet etc.

3.This list contains certain drugs which are either hazardous or redundant and surprisingly precisely these have been mentioned by brand name rather than scientific name (hopefully just an accident)-

Analgin: A drug widely banned, for which safe and inexpensive alternatives exist.

Avil: Does this refer to tablets or injections? What are the specific indications?

Decadron: In either tablet or injection form what are the indications for use by the JSR? Are we not promoting irrational therapy by putting this on the basic drug list?

Neosporin powder/oint.: This is quite an expensive, brand topical preparation containing three antibiotics. Costs much more than, and is probably as effective as Gentian Violet or plain Neomycin.

IV. Dr. Prabir Chatterjee, Community Health and Development, Christian Medical College - Vellore - 632 002, Tamil Nadu.

There are quite a few spelling errors in the Manual. There are also places where the treatment is that of the old government recommendations than the currently accepted practice.

Examples : Page 58 (5) Malaria - the manual recommend 600 mg. chloroquine ("presumptive treatment") rather than the WHO's radical treatment of 1500 mg. (which takes care of FALCIPARUM).

Page 66 (1) TB - the manual refers to Rifampsiliny. (!)

Question 69 : Filaria - one wonders whether Chyluria is really an important sign of this disease and whether it needs to be highlighted in a manual for middle level health workers.

Page 204 - Appendix 2 (Code of conduct) expects the student to "obey all orders of all health department officials". After the SATHIN's problems in Rajasthan one wonders whether this would be the best.

Page 205 - Appendix 3 (Drug Kit) ANALGIN and DECADRON do not seem to be warranted.

One cannot support the use of non generic names like AVIL and SAVLON especially when cheaper alternatives are available.

It would be sensible to include:

ASPIRIN (instead of ANALGIN)
BENZYL BENZOATE
WHITEFIELD's OINTMENT
ANTACID
METRONIDAZOLE

as the middle level health worker after 6 months in service training should be capable of using these.

On the whole however the book is excellent and the language very readable. The companion manual for the Village Health Committee was reasonable.

Some questions:

CH.5, page 7 - Why not bathe a newborn immediately (unless preterm) and in cold weather?

CH.8, page 13 - Why not describe the proportions of sugar and salt for a housemade ORS?

CH.11, Page 17 - Is the language here a bit stilted.

CH.12, Page 19 - Is this a bit impractical?

CH 14, page 21 - Does TV affect eyesight? Is it common in MP villages? Why no mention of spectacles?

CH.16, Page 22 - Could the samiti even test salt for 10 iodine contents

V. Dr. Abhay Bang, SEARCH, (Society for Education, Action & Research in Community Health) Gadchiroli, Maharashtra - 442 605.

I found the concept of such worker and the new stated focus on RCH very interesting and encouraging.

The actual contents of the job description and manual however gave feeling that there was not much new about the contents. Moreover, the role vis-a-vis health care system was still that of a subordinate helper at the village level. How is this worker going to be financed (besides TRYSEM)?

A more detailed The task analysis would be very worthwhile provided MP health department can really implement it. On the contrary, as I said in the beginning, the concept of such worker is very attractive proposition.

VI. Dr. Anant R. Phadke, medico friend circle, 50, LIC Quarters, Pune - 411 016.

1. Discrepancy between "JSR Responsibilities" in page One and "JSR Functions" in page 202 must be reviewed.

2. Discrepancy between the space and importance given to various topics in the manual and the number of lectures allotted to these topics in Annexure - II. (page 223-229). For example, the text matter in the manual is too little to occupy 10 lectures on anatomy; there is no text on the 10 drugs mentioned on page 224 in Annexure - II for 10 lectures on pharmacology. Moreover the allocation of one lecture per medicine is ridiculous, with no lecture/text on the elementary concepts in pharmacology.

3. Every lesson should start with learning objectives and the text should be tailored to these learning objectives. Nothing of this kind has even been attempted. Hence it is difficult to evaluate the text systematically. Overall, one can definitely say that there are many unnecessary details given in anatomy, whereas the lessons on Tuberculosis, leprosy, typhoid/filaria/dengue fall short of minimum level of understanding of the subject.

4. Treatment of common diseases is too brief (Chapter 20), sometimes not scientific and there is no attempt to diagnose the underlying condition. Use of non-allopathic medicines in some of the conditions listed in this chapter is questionnable when cheap, effective, simple therapy is available in allopathy. Treatment of common diseases is people's felt need. But that does not seem to be the concern of the manual.

5. The drug list as given in ' Chapter - 3' is quite defective and contains even analgin!

6. In Chapter-19, a format for clinical examination has been given. But there is nothing on how to assess the significance of various findings.

7. The above are general comments about the overall structure of the manual. The contentsof the manual invite a lot of criticism, changes on almost every page, every para. There are many many technical mistakes and many controversial statements. Going into these details is a big separate exercise.

8. Chapters 14, 15 however stands apart from other chapters. These two chapters do not contain mistakes and are well written giving relevant information about case of the new-born, diarrhoea, ARI, vitamin A deficiency. Though many other issues have not been touched, atleast whatever has been covered is OK.

VI. Dr. Ashok Bhargava, IDEAL (Institute for Development Education and Learning), B 4/1 Sahajanand Towers, Jivaraj Park, Ahmedabad-380051.

On the whole the manual is very good and precise.

Some comments:

1. While all the problems related to health and illnesses covered in the manual are important from national perspective some of these problems would be more important from the local perspective - for example there are endemic areas for dengue, filaria and leprosy. The JSRs belonging to these areas will require more specific training in these health problems.

2. Anatomy, physiology and epidemiology should be taught with the respective health problems rather than as separate topics as in Chapter -3 and 4.

3. Similarly, what health education will have to be provided to the patients, patient's relatives and in the community, should be covered with every health problem. For example, Chapter 7 on TB. The chapter does not cover important health messages. On the isolation of TB patients. Once the patient is put on ANT (Anti TB drugs) he/she cannnot spread TB. So there is no need for isolation within the home.

4. There is a separate chapter on the examination of the patient. Examination is always problem specific. Important points of clinical examination should be given with the health problem.

5. There should be a separate chapter on common gynaecological problems like white discharge, monoliasis etc.

6. Enclosed as an Annexure is a booklet on "How to develop a training programme with special reference to grassroot health workers" from the mfc-Primary Health Care Cell, which would be a useful reference for JSR trainers.

Enclosure:

A. Booklet on "How to develop a training programme.

Enclosure : A (Comments VI)

HOW TO DEVELOP A TRAINING PROGRAMME

WITH

SPECIAL REFERENCE TO

GRASSROOT HEALTH WORKERS

IDEAL
(Institute for Development Education and Learnint)
B 4/1, Sahajanand Towers,
Jivaraj Park,
Ahemdabad - 390 051

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शब्दावली

प्रशिक्षण	Training
सीखना	Learning
शिक्षा	Education
कार्य	Activity
काम	Task
अभ्यास	Exercise
जानकारी	Knowledge
कुशलता	Skills
अभिवृत्ति	Attitude
कसौटी	Criterion
मूल्यांकन	Evaluation
उद्देश्य	Objectives
अंतःप्रेरणा	Motivation
विश्लेषण	Analysis
कारगुजारी	Performance
अंतःप्रेरणा	Motivation
परिचालित	Guided
मुआवजा	Compensation

१. संस्था की प्रशिक्षण जरूरतों का विश्लेषण

इस विश्लेषण का उद्देश्य यह पता लगाना है कि संस्था की कारगुजारी सुधारने में प्रशिक्षण किस हद तक मददगार हो सकता है. कारगुजारी में कमी के तीन कारण हो सकते हैं –

१. काम के वातावरण में कमियां
२. अंतःप्रेरणा व प्रोत्साहन का अभाव
३. जानकारी व कुशलता का अभाव

प्रशिक्षण की जरूरत तब होती है जब कारगुजारी में कमी का कारण जानकारी व कुशलता का अभाव हो.

१.१ वातावरण में कमी (Environmental deficiency)

काम के वातावरण में कमियों का पता लगाने के लिए नीचे लिखे सवालों का जवाब खोजना चाहिए –

१. क्या कार्यकर्ताओं को अपना काम स्पष्ट है?
२. उन्हे काम के बारे में स्पष्ट अनुदेश (instructions) दिये गये हैं?
३. क्या काम की भूमिका में द्वंद है?
४. क्या कार्यकर्ता पर जरूरत से ज्यादा बोझ है?
५. कार्यश्रृंखला (workflow) का आयोजन सही है?
६. काम करने के लिए जरूरी साधन उपलब्ध हैं?
७. क्या लोगों को सेवाओं की जरूरत है?

१.२ अंतःप्रेरणा व प्रोत्साहन का अभाव

१. क्या कार्यकर्ता सेवाओं का महत्व नहीं समझते?
२. क्या उन्हे अपने काम का उचित मुआवज़ा नहीं मिलता?
३. क्या अच्छे काम के लिए पुरस्कार मिलता है?
४. क्या काम की शर्तें ठीक नहीं हैं?
५. क्या काम नहीं करने से लाभ होता है?
६. क्या कार्यकर्ताओं में असंतोष है?

१.३ जानकारी व कुशलता का अभाव

१. क्या कार्यकर्ता नये हैं?
२. क्या काम जटिल है?
३. क्या काम करने में निर्णय लेना पड़ता है?
४. क्या कार्यकर्ता को काम करने का तरीका सिखाया गया है?
५. क्या कार्यकर्ता को उसके काम पर प्रतिभाव (feedback) दिया जाता है?
६. क्या प्रशिक्षण के दौरान कुशलताओं का अभ्यास करवाया गया था?

(प्रतिनिधियों द्वारा अभ्यास)

२. प्रशिक्षण की कला (Craft of Training)

ज्यादातर प्रशिक्षण के कार्यक्रमों में कार्यकर्ता को यंत्रवत काम करना सिखाया जाता है. उन्हें क्या करना है, कैसे करना है यह तो बताया जाता है पर क्यों करना है यह कई बार नहीं बताया जाता.

काम का व्यापक संदर्भ तथा वैज्ञानिक जानकारी, जितनी वे समझने की योग्यता रखते हों उतनी, अवश्य दी जानी चाहिए. बहुत से कार्यकर्ता अधिक पढ़े लिखे नहीं होते. इस कारण विज्ञान की बुनियादी बातों से वे अनजान होते हैं. इसलिए प्रशिक्षण का एक अतिरिक्त उद्देश्य कार्यकर्ता को विज्ञान सिखाना होना चाहिए. कार्यकर्ताओं में स्वाध्याय तथा सीखने की वृत्ति का विकास हो यह भी देखना चाहिए. कार्यकर्ता को अपना काम सही तरीके से करने के लिए जो ज्ञान चाहिए उसे हम तीन चरणों में बांट सकते हैं -

१. जरूरी ज्ञान (Must know)
२. उपयोगी ज्ञान (Useful to know)
३. रोचक ज्ञान (Interesting to know)

२.१ ऐसी जानकारी जिसके बिना कार्यकर्ता अपना काम नहीं कर सकता, जरूरी ज्ञान कहलाती है. हर कार्यकर्ता को जरूरी ज्ञान होना ही चाहिए. यह प्रशिक्षण का मुख्य ध्येय होता है.

२.२ ऐसे तथ्य एवं कुशलताएं जो कार्यकर्ता को अपना काम करने में उपयोगी लगें वे भी हस्तगत करने में कार्यकर्ता की मदद की जानी चाहिए.

२.३ कुछ जानकारियां रुचिकर होतीं हैं तथा तथ्यों को याद रखने व समझने में मदद करतीं हैं. कई बार ऐसी जानकारी अभिवृत्ति (attitude) विकसित करने में मददगार होती है. अगर कोई कार्यकर्ता किसी विषय में जरूरत से ज्यादा जानना चाहे तो समय बचने पर उसकी मदद करें.

प्रशिक्षण की आवश्यकता का पता लगाने के लिए जरूरी है कि हमें कार्यकर्ता के कार्य विवरण की जानकारी हो. अगर कार्य विवरण उपलब्ध न हो तो इस प्रकार बनायें -

३. कार्य विवरण (Job description)

१. कार्यकर्ता का प्रकार
२. जिन परिस्थितियों में काम करना है उनका वर्णन - जगह, समुदाय, समय इत्यादि
३. कार्यकर्ता की जवाबदारियां (functions)
४. कार्यक्रम में कार्यकर्ता की भूमिका
५. जवाबदारी निभाने में किन समस्याओं का सामना करना पड़ेगा
६. इन समस्याओं का सामना करने के लिए कार्यकर्ता को क्या- क्या मालूम होना चाहिए
७. कार्यकर्ता को पहले से कितना मालूम है

६ - ७ = प्रशिक्षण की जरूरत

४. कितना प्रशिक्षण?

यह तय करने के लिए कि प्रशिक्षण में क्या और कितना सिखाया जाय एक और विश्लेषण करना जरूरी है. इसे DIF विश्लेषण कहते हैं. कोई काम कितना जटिल (Difficult) है, कितना महत्वपूर्ण (Important) है तथा कितनी बार (Frequency) उसकी जरूरत पड़ती है. काम जितना ज्यादा कठिन और महत्वपूर्ण हो उतनी ही ज्यादा तालीम की जरूरत होगी. जो काम बार-बार करने पड़ते हों उनका महावरा हो जाता है. पर जो काम महत्वपूर्ण हैं और जिनकी जरूरत कभी-कभी ही पड़ती है उनके लिए और ज्यादा तालीम की जरूरत होती है.

इस विश्लेषण से जरूरी ज्ञान, उपयोगी ज्ञान तथा रोचक ज्ञान तय करने में भी मदद मिलेगी.

कार्य विवरण का उदाहरण -

१. कार्यकर्ता का प्रकार - ग्राम स्वास्थ्य कार्यकर्ता (VHW)

२. काम की परिस्थितियां - बीमार होने पर गांव के लोग सबसे पहले उसकासंपर्क करते हैं. अगर कार्यकर्ता को बीमारी न समझ में आये तो वह वरिष्ठ कार्यकर्ता के पास मरीज को भेजता है.

३. जवाबदारियां **(Functions)** –

अ. प्राथमिक उपचार देना

ब. सफाई व पीने के पानी की जांच

क. बीमारियों की रोकथाम

४. कार्य **(Activities)**

अ.१ मरीजों को देखना तथा दवा देना.

अ.२ बीमारी न समझ में आये ऐसे मरीज को स्वास्थ्य केंद्र पर भेजना.

ब.१ संडास के निर्माण में मदद.

ब.२ पानी में क्लोरीन डालना.

क.१ टीकाकरण का आयोजन

क.२ स्वास्थ्य शिक्षण

यह सूचि देखने से पता चलता है कि हर जवाबदारी के तहत दो-दो गतिविधियां बतायी गयीं हैं.

(प्रतिनिधियों द्वारा अभ्यास)

५. काम का विश्लेषण (Task analysis)

किसी भी काम को सही तरीके से करने के कई चरण होते हैं. ये चरण काम की विभिन्न अवस्थाओं की तस्वीर (snapshots) जैसे होते हैं. इस विश्लेषण में काम के कई पहलुओं को देखा जाता हैं -

१. क्या कदम उठाना है?

२. कदम कब उठाना है?

३. निर्णय कहां लेना है?

४. काम कब पूरा हुआ माना जायेगा?

उदाहरण १ -

काम - स्पार्क प्लग साफ करना

कब करना है? जब स्कूटर मिस फायर करता हो.

१. इग्नीशन सोकेट निकालिये

२. स्पार्क प्लग खोलिये

३. प्लग का निरीक्षण कीजिये

४. अगर बहुत घिस गया हो तो बदल दें **(निर्णय)**

५. अगर कार्बन जम गया हो तो खुरच डालें

६. गेप ठीक करें

७. प्लग में इग्नीशन तार जोड़कर किक मारें तथा स्पार्क देखें **(निर्णय)**

८. अगर स्पार्क सही हो तो इग्नीशन तार हठायें

९. प्लग फिट करें

१०. स्कूटर चालू करें, अगर ठीक चलता हो, तो चरण १२ पर जायें **(निर्णय)**

११. स्कूटर चालू न हो तो अन्य कारण खोजें

१२. औजार साफ करके डिक्की में रखें

१३. अपने हाथ साफ करें.

काम कब पूरा हुआ माना जायेगा? जब स्कूटर बराबर चले तब.

यही काम आप फ्लो चार्ट (Flow chart) बनाकर भी कर सकते हैं.

उदाहरण २ -

कार्य विवरण के उदाहरण के कार्य ४.अ.१ मरीजों को देखना व दवा देना के उपकार्य या काम **(Task)** होंगे –

१. मरीज की हिस्ट्री लेना

२. शरीर की जांच करना

३. मलम-पट्टी करना

४. दवा की खुराक तय करना, इत्यादि.

(प्रतिनिधियों द्वारा अभ्यास)

६. जानकारी, कुशलता तथा अभिवृत्ति (Knowledge, Skills, and Attitudes)

काम का विश्लेषण कर लेने के बाद अगला चरण है यह पता लगाना कि इन कामों को करने के लिए कार्यकर्ता को किस प्रकार की जानकारी, कुशलताओं तथा अभिवृत्ति की जरूरत होगी.

जानकारी – याने विषय के बारे में तथ्य तथा उन्हें इस्तेमाल करके समस्या सुलझाने की कार्यकर्ता की योग्यता.

कुशलता – याने ऐसे कार्य जो कार्यकर्ता अभ्यास करके सीखते हैं. इनमें हाथ तथा ज्ञानेन्द्रियों की मदद से किये जाने वाले काम, जनसंपर्क कौशल, बीमार की विगत लेना आदि शामिल हैं.

अभिवृत्तियां – व्यक्ति की भावनाओं, मान्यताओं, मूल्यों से परिचालित होतीं हैं. करुणा, सहानुभूति का व्यवहार, जवाबदारी का अहसास आदि अभिवृत्तियां हैं.

सभी कामों को इन तीन हिस्सों में बांटने का प्रयत्न न करें. कई बार ऐसा करना संभव भी नहीं होता. महत्वपूर्ण बात यह जानना है कि किसी काम को अंजाम देने में कौनसी जानकारी, कौशल व अभिवृत्ति जरूरी होंगे. इन्हे अलग-अलग करके देखना अर्थहीन है.

उदाहरण - बीमार की शारीरिक जांच के लिए

जानकारी - शरीर के कार्यों का ज्ञान, सामान्य व असामान्य की समझ इत्यादि.

कौशल - स्टेथोस्कोप का प्रयोग.

अभिवृत्ति - बीमार के प्रति अच्छा व्यवहार.

(प्रतिनिधियों द्वारा अभ्यास)

गतिविधि -

काम	जानकारी	कुशलता	अभिवृत्ति

७. सीखने के उद्देश्य (Learning objectives)

७.१ प्रशिक्षण की फलश्रुति जानने के लिए यह जरूरी है कि हम जानकारी व कुशलताएं सीखने के उद्देश्य निर्धारित करें. प्रशिक्षण के पूरा होने पर कार्यकर्ता क्या कर सकेंगे **जिसे मापा जा सके.** यह तय करना चाहिए कि

अ. कार्यकर्ता क्या कर सकेंगे?

ब. किन परिस्थितियों में कर सकेंगे?

क. कैसे तय करेंगे कि काम संतोषजनक रहा?

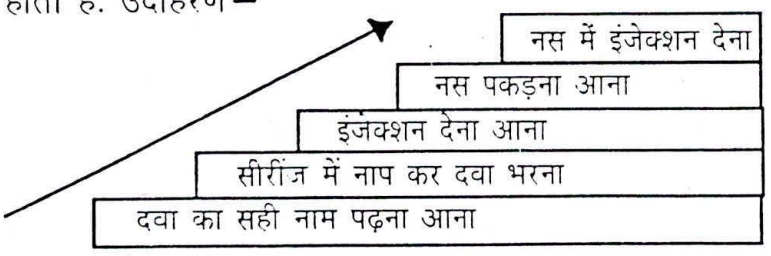
उदाहरण : अ. कार्यकर्ता नस में इंजेक्शन दे सकेगा

ब. किसी भी वजन वाले मरीज को

क. ज्यादा से ज्यादा दो बार सुई घोपकर

७.२ कुशलताओं की सीढ़ियां (Skill hierarchies)

कुछ कौशल ऐसे होते हैं जिन्हे अन्य कौशलों के पहले सीखना आवश्यक होता है. उदाहरण –



उदाहरण – सीखने के उद्देश्य

गतिविधि (Activity) - MCH Clinic in Community

काम - बच्चे के विकास की जांच

सीखने के उद्देश्य -

प्रशिक्षण के बाद कार्यकर्ता –

१. बच्चे के विकास के सीमाचिन्ह बता सकेगा.

२. बच्चों की लंबाई व वजन नापने के मानदंड कह सकेगा.

३. रोते हुए बच्चे को वजन कांटे में बिठा सकेगा.

४. बच्चे की लंबाई १ सेंटी मीटर तक सही नाप सकेगा.

५. बच्चे का वजन १०० ग्राम तक सही तौल सकेगा.

६. ग्राफ पर बच्चे का वजन व लंबाई प्लॉट कर सकेगा.

(प्रतिनिधियों द्वारा अभ्यास)

८. प्रशिक्षण की विषय वस्तु तय करना (Contents of Training)

कार्य की परिस्थिति का विश्लेषण
Analysis of the Work Situation

↓

कार्यकर्ता के कार्य
Functions of Health Worker

↓

कार्य विवरण
Job Description

↓

उपकार्यों का विश्लेषण
Task Analysis

↓

जानकारी, कुशलता व अभिवृत्ति पर आधारित सीखने के उद्देश्य
Learning objectives based on Knowledge, Skills and Attitudes

↓

सीखने के उद्देश्यों की प्राप्ति के लिए विषय वस्तु
Contents to achieve Learning Objectives

(प्रतिनिधियों द्वारा अभ्यास)

९. शिक्षा शास्त्र तथा प्रशिक्षण

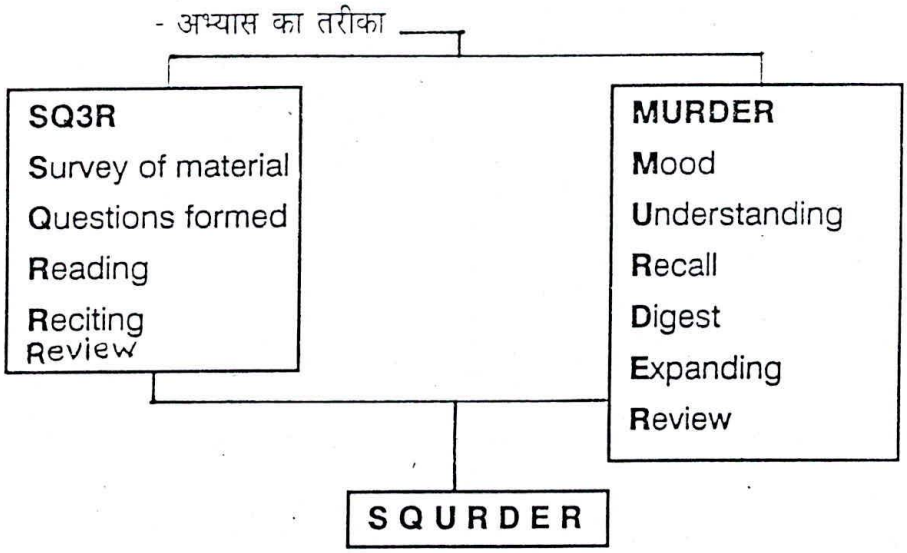
१०. सीखने की परिस्थितियां (Conditions of Learning)

१०.१ सही वातावरण

- प्रकाश, हवादार जगह, तापमान
- बैठने की व्यवस्था
- शिक्षण साधन
- शिक्षक का व्यवहार
- समानता का माहौल

१०.२ व्यक्तिगत घटक (Personal factors)

- प्रेरणा (motivation)
- अभिरुचियां (interests)
- योग्यताएं
- अभ्यास का तरीका



११. जानकारी सीखने के लिए सही परिस्थितियां (Conditions of Learning of Knowledge)

११.१ जानकारी समझ में आये, दिमाग में संचित हो तथा समय आने पर उसका इस्तेमाल किया जा सके - यह सीखने का ध्येय है.

११.२ जानकारी का इस्तेमाल जिस क्रम में करना हो उसी क्रम में उसे समझना तथा संचित करना चाहिए. विषय वस्तु तय करते समय ध्यान रखें कि विषय के विभिन्न पहलुओं को समग्रता में प्रस्तुत किया जा सके. उदाहरण के लिए anatomy, physiology, epidemiology, nutrition, physical growth आदि सिखा कर यदि protein-calorie malnutrition सिखाने जायेंगे तो जानकारी याद रखने तथा इस्तेमाल करने में कठिनाई होगी.

११.३ जानकारी समझ में आने वाली हो, उपयोगी हो तथा क्रमबद्ध तरीके से सीखी गयी हो.

११.४ सिखाने का क्रम

- जाने हुए से अनजाने की ओर
- सरल से जटिल की ओर
- ठोस से अमूर्त की ओर
- अवलोकन से तर्क की ओर (Obeservation to reasoning)
- समग्र से तफ़सील की ओर (Whole to part) होना चाहिए

११.५ जानकारी का उपयोग करने का अभ्यास करवाया जाना चाहिए.

१२. कुशलताएं सीखने की सही परिस्थितियां

१२.१ कार्यकर्ता को पता होना चाहिए कि उन्हें क्या करना है.

१२.२ कुशलता को छोटे-छोटे हिस्सों मे विभाजित कर एक-एक करके सिखाना चाहिए.

१२.३ कुशलताओं का बार-बार अभ्यास किया जाना चाहिए.

१२.४ जिन परिस्थितियों में कार्यकर्ता को सीखने के बाद काम करना है लगभग उन्ही परिस्थितियों में अभ्यास करवाना चाहिए.

१२.५ अभ्यास सही तरीके से किया जाय इसके लिए अभ्यास के समय प्रशिक्षार्थी को नियमित अभ्यास पर प्रतिभाव (feed back) दिया जाना चाहिए.

१२.६ जब तक प्रशिक्षक संतुष्ट न हो अभ्यास चालू रखना चाहिए.

१३. अभिवृत्ति सीखने की परिस्थितियां

१३.१ अभिवृत्ति सिखायी नहीं जा सकती.

१३.२ कार्यकर्ता को अभिवृत्ति का अहसास कराया जाना चाहिए.

१३.३ अभिवृत्ति बदलने में सहायक हो ऐसी जानकारी उसे देनी चाहिए.

१३.४ सही अभिवृत्ति वालों का निरीक्षण करने का मौका उन्हे मिलना चाहिए.

१३.५ नयी अभिवृत्ति के साथ काम करने का अनुभव लेने देना चाहिए.

१४. लोग कैसे सीखते है? (How people learn?)

१४.१ लोग अपने आप सीखते हैं. सीखना दिमाग की आंतरिक क्रिया है. हर व्यक्ति अपना ज्ञान खुद निर्मित करता है. दूसरे लोग जानकारी दे सकते हैं, ज्ञान नहीं.

१४.२ व्यक्ति को सीखने की इच्छा/जिज्ञासा होनी चाहिए. अनमनेपन से सीखा नहीं जा सकता, रटा जा सकता है.

१४.३ व्यक्ति को सीखना स्वयं के लिए महत्वपूर्ण लगना चाहिए.

१४.४ लोग स्वयं करके तथा अपनी ग़लती को सुधार कर अधिक सीखते हैं. इसलिए सीखते समय प्रयोग करके तथा ग़लती करके सीखने के लिए गुंजाइश रहनी चाहिए.

१४.५ सीखी हुई बातों को अमल में लाना पड़ता है तभी वे समझ में आतीं हैं.

१४.६ जानकारी अगर क्रमबद्ध, तर्कसंगत तथा व्यवहारिक हो तो सीखने में सुविधा होती है.

१४.७ जानकारी अगर रोचक, दिलचस्प, आकर्षक, विचारोत्तेजक या उत्सुकता पैदा करने वाली हो तो याद रखने में आसानी होती है.

१४.८ अगर जानकारी लोगों के वर्तमान ज्ञान से जोड़कर प्रस्तुत की जाय तो आसानी से समझ में आती है.

१४.९ लोगों को सीखने में अगर सक्रिय भागीदार बनाया जाय तो जल्दी समझ में आता है.

१५. प्रशिक्षण के तरीके

१५.१ **व्याख्यान (Lectures)** – का प्रशिक्षण में जरूरत से ज्यादा उपयोग किया जाता है. व्याखान का उपयोग जानकारी देने में किया जा सकता है. परन्तु जानकारी का उपयोग, कुशलता या अभिवृत्ति विकसित करने में यह तरीका उपयोगी नहीं है.

१५.२ **छोटे समूह में चर्चा (Group discussion)** – समस्या सुलझाने में जानकारी का इस्तेमाल करना सीखने, निदर्शन, अभिवृत्तियों को दिशा देने आदि के काम में समूह चर्चा लाभदायक रहती हैं.

१५.३ **क्लीनिक तथा लेबोरेटरी** – कुशलताएं सीखने के लिए अच्छी जगह है. जहां वास्तविक वस्तुओं पर काम करके सीखा जा सकता है.

१५.४ **प्रत्यक्ष कार्य (Field Work)** – कुशलताएं तथा अभिवृत्तिओं को आकार देने के लिए सबसे उत्तम स्थान है लोगों के बीच प्रत्यक्ष कार्य.

१६. प्रशिक्षण सामग्री

१६.१ **लिखित सामग्री (Handouts)** - प्रशिक्षण के समय विषय से संबंधित नोट्स प्रशिक्षार्थियों को दिये जा सकते हैं. व्याख्यान एवं चर्चा के समय प्रशिक्षार्थियों का समय नोट्स लेने में नहीं जाता तथा वे विषय की प्रस्तुति पर ध्यान एकाग्र कर सकते हैं.

१६.२ **ट्रांसपेरेन्सी (Transparencies)** - ओवर हेड प्रोजेक्टर की मदद से विषय के मुख्य मुद्दे, चित्र तथा ग्राफ पर्दे पर दिखाये जा सकते हैं. प्रस्तुतकर्ता का मुंह श्रोताओं की ओर रहता है. यह इस्तेमाल में तथा बनाने में आसान है.

१६.३ **स्लाइड (Slides)** - बीमारी के लक्षण या चित्रों को बढ़ाकर दिखाने के लिए यह उपयोगी साधन है.

१६.४ **फ्लिप चार्ट** - जहां बिजली न हो तथा समूह छोटा हो तो ट्रांसपेरेंसी की जगह फ्लिप चार्ट का इस्तेमाल किया जा सकता है.

१६.५ **मोडेल** - वास्तविक आकार के मोडेल सीखने में बहुत मददगार होते है. कार्यकर्ताओं को मोडेल छू कर देखने देना चाहिए.

१६.६ **विडिओ** - विडिओ द्वारा शरीर की रचना तथा समस्याओं के बारे में वास्तविक चलचित्र दिखाये जा सकते हैं जो सीखने में तथा याद रखने में खूब प्रभावकारी होते हैं.

१६.७ **कंप्युटर एनिमेशन** - इसके द्वारा कृत्रिम विडिओ कार्यक्रम तैयार किये जा सकते हैं.

१६.८ **मिश्र माध्यम (Multi-media)** - एक विषय की प्रस्तुति में एक से अधिक माध्यमों का इस्तेमाल करना चाहिए. इससे विषय को हर पहलू से समझने का अवसर मिलता है तथा एक से अधिक ज्ञानेन्द्रियों का इस्तेमाल होता है.

१७. प्रशिक्षण की कसौटी (Criterion Test)

यह जांचना कि जिस काम को करने का प्रशिक्षण दिया गया है वह काम दी गयी परिस्थितिओं में करना आया या नहीं.

आप ऑपरेशन टेबल पर हैं. डॉक्टर आपको आश्वासन दे रहा है - 'आप घबराइये नहीं. मैं बस कुछ ही मिनटों में आपकी एपेंडिक्स निकाल दूंगा.'
आप पूछते हैं - 'डॉक्टर आपने पहले कभी एपेंडिक्स का ऑपरेशन किया है?'
डॉक्टर - 'नहीं, पर मैंने सभी परीक्षाएं अच्छे नम्बरों से पास की हैं.'
आप पूछते हैं - 'कैसी परीक्षा?'
डॉक्टर - 'मैंने सभी MCQs का सही जवाब दिया था. मैंने एपेंडिक्स के ऑपरेशन पर एक निबंध भी लिखा था. और मैने कई ऑपरेशनों का निदर्शन भी देखा था.'

१७.१ सीखने के उद्देश्यों में जो अपेक्षा कार्यकर्ता से की गयी हो उसी की परीक्षा होनी चाहिए.

१७.२ जिन परिस्थितियों में काम करना है उन्ही परिस्थितियों में जांच करनी चाहिए.

१७.३ परीक्षा में सफल तभी माना जाना चाहिए जब काम सही तरीके से किया गया हो.

१८. सबक का आयोजन (Lesson Plan)

प्रशिक्षण के दौरान विषय सिखाने का आयोजन करने के लिए एक तालिका बनाइये जिसमें विषय वस्तु को सिखाने के लिए प्रशिक्षक क्या करेगा, प्रशिक्षार्थी क्या करेंगे, सामग्री क्या इस्तेमाल होगी, कसौटी कैसे करेंगे तथा समय कितना लगेगा इसका विवरण हो.

सबक आयोजन तालिका

विषय वस्तु	प्रशिक्षक क्या करेगा	प्रशिक्षार्थी क्या करेगा	सामग्री	कसौटी	समय

(प्रतिनिधियों द्वारा अभ्यास)

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VII. Dr. Ulhas Jajoo, MGIMS (Mahatma Gandhi Institute of Medical Sciences), Wardha 442 102.

Jan Swasthya Rakshaks cannot work in isolation primarily because they do not enjoy credibility as a healer. The priority health needs of the people cannot be fulfilled by the reflected glory of the credible health care delivery system.

A crash curriculum in the indoors, does not imbibe required skills. They learn by doing. The inwork training adapted to the local situation by a visionary trainer (as was done at Mangrol) is required. Abstract learning is too much for them.

To seek people's involvement in form of a functioning Health Committee is more on paper than in practice. Unless village based worker is empowered (by resources that he/she can offer) and buttressed by the system, people's involvement is too much to expect.

A service sector (Health) programme based on 'modern' science, will have to be vertical (capital intensive), thus its quality depends on accountability of the system for the common masses. It will have to dole out services and does not tend to build upon what they have.

VIII. Dr. Dhruv Mankad, Project Director,VACHAN (Voluntary Association for Community Health and Nurture), Vasundhara Bungalow, Shivajinagar, opp. Vijaya-Mamata Talkies, Nasik - Pune Road, Nasik - 422 006.

1. It is highly needed scheme and deserves to be implemented extensively. It is really nice that it has started very enthusiastically. However, the creation of a new cadre is either not conceptualised or if it is then very hazily. There is no clarity about the roles and responsibility of the JSRs : are they in the lowest rung of the government health hierarchy, or the implementors of government health schemes with a little bit of a need based health service or independent practitioners or a hotchpotch of all? There is no clarity of its operational process : selection, training and certification, logistic of TRYSEM loan and drug supply, supervision/regulatory mechanism etc.

2. There are very informative chapters which are essential components of the curriculum eg., Environmental and personal hygiene. These are considered as a part of First Contact Care.

3. The curriculum-cum-manual has been prepared the first time by any government machinery so soon and with a different vision from the usual vertical programme manuals based on technical skill development. Thye need congratulations for this sincere effort. Again, however, its hastiness is reflected in the overall nature of the manual. It is not easily readable because it has used complicated English and/or Hindi terms eg., on p 23 a technical term. Like 'intermediate metabolism' written in Devanagari script and without any clear explanation as to what it means. Lots of unnecessary,(unrelated to the main purpose of the training manual) information is filled in, particularly in Anatomy, Physiology. On the other hand important and useful information is missing eg., how absorption takes place in small intestine and its relationship to dehydration in acute diarrhoea is missing.

4. There is no mention about inflammation - healing, bleeding-clotting, infection-immunity as basic defensive responses of human body. Without this it is impossible to understand the supportive role of external interventions like drugs, immunisation, environmental intervention, etc.

5. The diagnostic system is totally absent. Without this how is the person is expected to 'practice' FCC is an enigma. This - the core curriculum - should be a must, since they are to provide curative services.

6. There is no balance between state driven health services and the demand driven services, the former are more than the later. If they would 'practice' then they would do 'more' of what they were trained 'less'.

7. The overall manual is dry. The writing style needs to be changed. Lot of tables, 'bulleted' information, graphical presentation, drawings, photographs are needed to make the manual 'live'.

8. The manual should be technically approved by a panel of experts so as to conform to the existing knowledge.

A long training programme for this kind of trainees may not be productive. Anyway they would need a continuing, refreshing, updating and upgrading education in order to cope up with the 'practice'. A self learning method supported by a supervised - tutorial - system may be a more effective system than just a didactic one as this one. This would give the advantage of building up confidence of the trainees as a result of self testing system included. Ofcourse, a periodic examination would be necessary.
I have enclosed the syllabus of training and list of drugs used by CHWs in our VACHAN programme (see enclosure)

Enclosure:

Appendix 1 : Syllabus of CHW training (VACHAN Programme)
Appendix 2 : The Drug Kits for CHWs in VACHAN programme.

ANNEXURE 1

SYLLABUS OF CHW TRAINING PROGRAMME

DAY SUBJECTS AND TOPICS

1 Arrival and introduction.
2 a) Introducing health care through herbs, b) A bird's eye view human body.
3 Orientation to health and ill health..diarrhoea etc..
4 Human body..cells, tissues, systems.
5 Human body..digestion and respiration.
6 Human body..other systems.
7 Nutrition..energy, proteins, requirements, malnutritions.
8 Causation of diseases.. immunity, inflammation etc..
9 Diagnosing illnesses, general approach, which diseases to treat and which to refer etc..
10 Principles of treating illnesses. Drug and non drug methods.
11 Modern pharmacology, how drugs work, ill effects. Select allopathic remedies (20 drugs).
12 Eye, its diseases.
13 Holiday.
14 Ear, its diseases.
15 Childhood illnesses,...Introducing to other health workers from Vachan* (afternoon).
16 Nutrition..some more topics*.., Select topics (our own meals) with health workers* (afternoon).
17 Pneumonia in childhood, respiratory system illnesses.
18 Examination of RS. (before noon)., Skin and wounds* (afternoon).
19 Other respiratory illnesses, Tuberculosis. (before noon), Health education in a village *.
20 Skills required in village health care.
21 Other respiratory illnesses..(before noon), Skills..(afternoon).
22 Digestive system illnesses, Dental health, (before noon).. Discussion with a herbalist health worker from other project (afternoon).
23 Some herbal medicinal usage *.
24 Digestive system illnesses.
25 Elementary care in womens' health *.
26 Personal, domestic and Community health.
27 Examination (MCQs), testing skills (group method).
28 An introduction to Homeopathy and tissue remedies *.
29 Discussion, Recapitulation, evaluation of training program.

*** Lists of topics covered by guest trainers.**

A separate list of 'skills' for health workers, demonstrated in the training program is appended with this.

APPENDIX 2 (Comments VIII)

THE DRUG KITS FOR CHWS IN VACHAN'S PROGRAMME

LIST OF MEDICINES SUPPLIED TO CHWS

NO.	SENIOR CHWS (>=2 YRS.)*	NO.	JUNIOR CHWS (<2 YRS.)*
1	WHITFIELD OINTMENT	1	VITAMIN C
2	VITAMIN C	2	VITAMIN A
3	VITAMIN A	3	PARACETAMOL
4	TETRACYCLINE EYE OINTMENT	4	ORS
5	SALBUTAMOL	5	METRONIDAZOLE
6	PARACETAMOL	6	MEBENDAZOLE
7	ORS	7	FURAZOLIDINE
8	METRONIDAZOLE	8	CODEINE
9	MEBENDAZOLE	9	CHLOROQUINE
10	FURAZOLIDIN	10	CPM
11	FERROUS SULPHATE	11	B-COMPLEX
12	CODEINE	12	ATROPINE
13	CO-TRIMOXAZOLE	13	ANTACID
14	CHLOROQUINE	14	GENTION VIOLET
15	CALCIUM LACTATE	15	DETTOL & BANDAGE
16	CPM		
17	B-COMPLEX		
18	ATROPINE		
19	ANTACID		
20	AMPICILLIN		
21	GENTION VIOLET		
22	DETTOL & BANDAGE		

Go to the people
Live among them
Learn from them
Love them
Start with what they know
Build on what they have.

* * *

Of the best leaders
the people only know that they exist;

The next best they love and praise;
the next they fear;

And the next they revile.
When they do not command the people's trust,
Some will lose faith in them,
And then they resort to recriminations!

But of the best, when their task is accomplished,
their work done,
The people all remark, 'We have done it ourselves!'

- Old Chinese Poem