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Appendicies

Appendix 1

Check List for Determining Provider Costs

Name of the Study: Cost Benefit Analysis of Case Finding
Activities: A Case of Leprosy Control
Program in Myanmar

Objectives : To determine the costs, the benefits and
the benefit cost ratios of case finding
activities from provide as well as
consumer perspectives for comparing
ACD and PCD in terms of early case
detection in three endemic areas namely
low, median and high endemic areas.

Part I Check List for data collection at Township Health
Department

(A) Costs for Building

- | | | |
|---|-------|------------|
| 1. Building Price | ----- | kyats |
| 2. Expected years of useful life | ----- | years |
| 3. Maintenance costs for building | ----- | kyats/year |
| 4. Number of total OPD patient | ----- | No./year |
| 5. Number of leprosy patient
who were diagnosed at OPD | ----- | No./year |

(B) Costs for Equipment

- | | | |
|------------------------------------|-------|------------|
| 1. Equipment Price | ----- | kyats |
| 2. Expected years of useful life | ----- | years |
| 3. Maintenance costs for Equipment | ----- | kyats/year |

(C) Costs for Vehicle

- | | | |
|----------------------------------|-------|------------|
| 1. Vehicle Price | ----- | kyats |
| 2. Expected years of useful life | ----- | years |
| 3. Maintenance costs for vehicle | ----- | kyats/year |

(D) Costs for Long-term training

- | | | |
|-----------------------------------|-------|------------|
| 1. Costs for perdiem(person*days) | ----- | kyats/year |
| 2. Traveling allowance | ----- | kyats/year |
| 3. Costs for training material | ----- | kyats/year |

(E) Costs for Social mobilization

- | | | |
|---|-------|------------|
| 1. Costs for posters and pamphlets | ----- | kyats/year |
| 2. Costs for giving Health Education
about leprosy | ----- | kyats/year |



Health Personnel ID
Health Personnel rank
State/Division

Part II. Health Personnel Costs(BHS & Specialized Staff)

1. How much salary have you received? ----- kyats/month
2. How much fringe benefit have you got other than salary? ----- kyats/year
3. How many minutes do you spend for diagnosis of leprosy patient for doing PCD activities? ----- min/patient
4. How many hours have you spent for doing contact examination? ----- hours/year
5. How many hours have you spent for doing school examination? ----- hours/year
6. How many hours have you spent for doing mass survey? ----- hours/year
7. How much traveling costs for doing contact examination activity? ----- kyats/day
8. How many days have you done contact examination within one year? ----- days/year
9. How much traveling costs for doing school examination within one year? ----- kyats/year
10. How much traveling costs for doing mass survey within one year? ----- kyats/year

Part III. Material Costs

1. Did the patients need to be diagnosed by microscopy? []
(1) No
(2) Yes
If yes,
2. How many numbers of material used for the diagnosis of leprosy with in one year?
 - 2.1 Glass slide --- No./year
 - 2.2 Reagent --- No./year
 - 2.3 Sterile knife --- No./year
3. How many times used for diagnosis with microscope for various control activities?
 - 3.1 Leprosy --- times/year
 - 3.2 Malaria --- times/year
 - 3.3 Other diseases --- times/year
4. How many paper used for diagnosis of leprosy(numbers of paper/patient)? --- No./pt
5. How many pens used for out patient clinic? []
 - 5.1 One pen / 10 patients
 - 5.2 One pen / 15 patients
 - 5.3 One pen / 20 patients

Part IV. Costs for Short Term Training

1. How much traveling allowance have you
got for attending short term training? --- kyats/year

Part V. Costs for Social Mobilization

1. How much did you spend for traveling to
give health education about leprosy?
(personnel from control program only) --- kyats/year
2. How often did you give health education? --- times/year

Appendix 2

Questionnaire for Patient Interview

- Name of the Study: Cost Benefit Analysis of Case Finding Activities: A Case of Leprosy Control Program in Myanmar
- Objectives : To determine the costs, the benefits and the benefit cost ratios of case finding activities from provider as well as consumer perspectives for comparing ACD and PCD in terms of early case detection in three endemic areas namely: low, median and high endemic areas.

A Sincere Request to the Participants

- * Name, address and signature are not needed in completing the forms
- * Your answers will be assured to be confidential.
- * Sincere and cordial thanks to all participants.

Patient ID

Interviewer's name

State/Division

I. General Information

1. Sex []
 - (1) Male
 - (2) Female
2. Age (completed year) []
3. Level of education (year of schooling) []
4. Occupation []
 - (1) Dependent
 - (2) Manual worker
 - (3) Private business
 - (4) Government service personnel
5. Distance between your residence and the clinics(in miles) []

II. Costs Information

For the patients who diagnosed by PCD method ---

1. How much do you pay for traveling to the clinic to seek diagnosis of the disease? ----- kyats
2. How much do you have to pay for your registration in this clinic? ----- kyats

3. How much have you spent for food while you are traveling to the clinic and seeking diagnosis in this clinic? ----- kyats
4. Have you taken a leave of absence from your work? []
(1) No
(2) Yes
- If yes,
5. What is your income? ----- kyats/month
6. Do you go there alone or with another person accompanying? []
(1) Alone
(2) Accompanied
- If you come with accompanying person,
7. How much did he/she pay for traveling to the clinic? ----- kyats
8. How much did he/she spend for food while traveling to the clinic and while you are seeking diagnosis in this clinic? ----- kyats
9. Did he/she take a leave of absence from his/her work? []
(1) No
(2) Yes
- If yes,
10. What is his/her income? ----- kyats/month
11. Do you have to pay the person for accompanying with you for diagnosis of the disease? []
(1) No
(2) Yes
- If yes,
12. How much have you spent for paying that person? ----- kyats

For the patients who diagnosed by ACD method ---

13. By which method of ACD had you been diagnosed? []
 (1) Mass survey
 (2) Contact examination
 (3) School examination

For patients who were diagnosed by mass survey

14. How much did you spend for traveling to that area? ----- kyats
15. How much did you spend for food while you were traveling to that area and seeking diagnosis for the disease? ----- kyats
16. Had you taken a leave of absence from your work? []
 (1) No
 (2) Yes

If yes,

17. What is your income? ----- kyats/month

For the patients who were diagnosed by contact examination,

18. Had you taken a leave of absence from your work? []
 (1) No
 (2) Yes

If yes,

19. What is your income? ----- kyats/month

Appendix 3

Estimation of Early Case Detection

The estimation of early cases detected by ACD and PCD is calculated by following.

The first assumption is 16% of the newly detected cases are disabled(late case). Therefore 84% of the newly detected cases in 1992 is acting as early cases. This 84% early cases were detected by ACD as well as PCD. In general, ACD can detect more early case than PCD. Therefore the second assumption is if ACD can detect 95% of the total cases as early cases, the percentage of PCD early case detection is calculated as follows.

In low endemic area,

$$\begin{aligned} \text{ACD Early Case Detection} &= 65 * 95\% = 61.75 \text{ (62)} \\ \text{Total Early Case Detection} &= 922 * 84\% = 774.48 \text{ (774)} \\ \text{Therefore PCD Early Case Detection} &= 774 - 62 = 712 \\ \text{PCD Early Case Detection(\%)} &= 712/857 * 100 \\ &= 83.1\% \end{aligned}$$

In median endemic area,

$$\begin{aligned} \text{ACD Early Case Detection} &= 636 * 95\% = 604.2 \text{ (604)} \\ \text{Total Early Case Detection} &= 1667 * 84\% = 1400.2 \text{ (1400)} \\ \text{Therefore PCD Early Case Detection} &= 1400 - 604 = 796 \\ \text{PCD Early Case Detection(\%)} &= 796/1031 * 100 \\ &= 77.2\% \end{aligned}$$

In high endemic area,

$$\begin{aligned} \text{ACD Early Case Detection} &= 1009 * 95\% = 958.5 \text{ (959)} \\ \text{Total Early Case Detection} &= 2729 * 84\% = 2292 \\ \text{Therefore PCD Early Case Detection} &= 2292 - 959 = 1333 \\ \text{PCD Early Case Detection(\%)} &= 1333/1720 * 100 \\ &= 77.5\% \end{aligned}$$

From those percentage, the early cases detected in three different scenarios are estimated as follows.

1. Baseline Scenario

The number of early cases are calculated by -

In low endemic area, For ACD $65 * 95\% = 62$
 For PCD $857 * 83.1\% = 712$

 Total = 774

In median endemic area, For ACD $636 * 95\% = 604$
 For PCD $1031 * 77.2\% = 796$

 Total = 1400

In high endemic area, For ACD $1009 * 95\% = 959$
 For PCD $1720 * 77.5\% = 1333$

 Total = 2292

2. ACD alone Scenario

In ACD alone scenario assumed that all the cases detected in 1992 were detected only by ACD. Therefore the number of early cases are estimated by multiplying the total number of new cases detected in 1992 into 95%.

In low endemic area - $922 * 95\% = 876$

In median endemic area - $1667 * 95\% = 1584$

In high endemic area - $2729 * 95\% = 2592$

3. PCD alone Scenario

In PCD alone scenario assumed that all the cases detected in 1992 were detected only by PCD. Therefore the number of early cases are estimated by multiplying the total number of new cases detected in 1992 into the percentage detected by PCD calculated in earlier.

In low endemic area - $922 * 83\% = 765$

In median endemic area - $1667 * 77\% = 1283$

In high endemic area - $2729 * 77\% = 2101$

Appendix 4

**Calculation of Costs for Each Method of Case Finding Activity
(Provider Perspective)**

The total costs for each method of case finding activity are calculated by equations explained in Chapter 4. The total costs for ACD and PCD are found out by using equation 7 and 8 respectively.

Personnel Costs for doing ACD

This cost item is calculated from equation 1 which is explained in Chapter 4. The total annual income of health personnel got from summation of annual salary and fringe benefit. The data for annual salary available from secondary data source. For fringe benefit assumed that, it will be 20% of the annual salary. The number of health personnel got from manpower list in that area.

The proportion time spent on doing ACD is calculated by following.

Total working hour for one year

$$6 \text{ hours} * 22 \text{ days} * 12 \text{ months} = 1584 \text{ hours}$$

For contact examination, The health personnel can do this activity only one hour per 3 months. Therefore, for this activity the health personnel spent only 4 hours per year.

$$p = \frac{4}{1584} = 0.0025$$

p = Proportion time spent on doing ACD

For school children examination, the health personnel spent only 3 hours per year. They have done this activity only once per year.

$$p = \frac{3}{1584} = 0.0019$$

p = Proportion time spent on doing ACD

For mass survey, The health personnel spent only 6 hours per year. They have also done this activity only once per year.

$$p = \frac{6}{1584} = 0.0038$$

p = Proportion time spent on doing ACD

Personnel Costs for doing PCD

The method of cost calculation is same as ACD. Calculation for proportion of time spent (q) is following.

For urban area,

The health personnel open the clinic every day and assumed that they used 1 hour per day for OPD activity.

$$1 \text{ hour} * 22 \text{ days} * 12 \text{ months} = 264 \text{ hours}$$

$$q = \frac{264}{1584} = 0.17$$

q = Proportion time spent on doing PCD

For rural area,

The health personnel open the clinic 3 days per week and assumed that they used 1 hour per day for OPD activity.

$$1 \text{ hour} * 3 \text{ days} * 4 \text{ weeks} * 12 \text{ months} = 144 \text{ hours}$$

$$q = \frac{144}{1584} = 0.09$$

q = Proportion time spent on doing PCD

Total Costs for Material Supplies

This cost item contained costs for glass slide, reagent, disposable knife for skin scrubbing, paper and pen.

In that case, the program personnel assumed that there are only 40% need to confirm the diagnosis by microscopy. The other 60% of newly detected cases are diagnosed by clinical signs and symptoms only.

Among the newly detected cases who need to confirm the diagnosis are-

	ACD	PCD
1. Yangon	65 * 40% = 26	857 * 40% = 343
2. Mandalay	636 * 40% = 254	1031 * 40% = 412
3. Magwe	1009 * 40% = 404	1720 * 40% = 688

For calculation of paper cost, they used 2 pieces of paper per one patient to fill up the registered form.

For pen, they used roughly one piece per 10 patients.

Total Costs for Short Term Training

This costs item contained per diem cost, traveling allowance (TA) and costs for training material.

Total Costs for Social Mobilization

This costs item contained costs for transporting educational material from States and Divisions to townships and costs for providing health education by leprosy control personnel.

TC.Mater.	(Ygn)						
	Item	Unit Cost	# (ACD)	# (PCD)	TC. ACD	TC. PCD	
	G. slide	5	26	343	130	1715	
	Reagent	2	26	343	52	686	
	S. Knife	3	26	343	78	1029	
	Paper	0.7	130	1714	91	1199.8	
	Pen	5	7	86	35	430	
					386	5059.8	
TC.Mater.	(Mdy)						
	Item	Unit Cost	# (ACD)	# (PCD)	TC. ACD	TC. PCD	
	G. slide	5	254	412	1270	2060	
	Reagent	2	254	412	508	824	
	S. Knife	3	254	412	762	1236	
	Paper	0.7	1272	2062	890.4	1443.4	
	Pen	5	60	100	300	500	
					3730.4	6063.4	
TC.Mater.	(Mag)						
	Item	Unit Cost	# (ACD)	# (PCD)	TC. ACD	TC. PCD	
	G. slide	5	404	688	2020	3440	
	Reagent	2	404	688	808	1376	
	S. Knife	3	404	688	1212	2064	
	Paper	0.7	2018	3440	1412.6	2408	
	Pen	5	100	150	500	750	
					5952.6	10038	

Appendix 5

Estimation of Unit Costs for repairing Footdrop

This cost item contained personnel costs, material and drug costs and costs for follow up.

For the personnel costs the surgeon only spent 1 hour for one patient who need to repair footdrop. Therefore the proportion time spent for that activity is -

$$\text{Proportion time spent} = \frac{1 \text{ hour}}{1584 \text{ hours}} = 0.000631$$

For the doctor, nurse and nurse aid they spent half hour per day for 6 days after operation. Therefore the proportion time spent is -

$$\text{Proportion time spent} = \frac{3 \text{ hours}}{1584 \text{ hours}} = 0.001894$$

The estimated unit cost for repairing Clawhand is almost same as those of Footdrop. Therefore for program side, only used unit cost for Footdrop for this study.

F. drop							
Item	# preson	T.spent	An. Salary	F. Benefit	T. Income	#of day care	T. Cost
Surgeon	1	0.0006313	51000	10200	61200	1	38.636364
Dr	1	0.0018939	42000	8400	50400	3	286.36364
Nurses	1	0.001894	26400	5280	31680	5	300.0096
N. aids	1	0.001894	22800	4560	27360	5	259.0992
Material & Drug							300
Follow up							200
						Total	1384.1088
Claw H.							
Item	# preson	T.spent	An. Salary	F. Benefit	T. Income	#of day care	T. Cost
Surgeon	1	0.0006313	51000	10200	61200	1	38.636364
Dr	1	0.001894	42000	8400	50400	3	286.3728
Nurses	1	0.001894	26400	5280	31680	5	300
N. aids	1	0.0018939	22800	4560	27360	5	259.09091
Material & Drug							300
Follow up							200
						Total	1384.1001

Appendix 6**Calculation of Total Costs for Patient Perspective**

For this cost item assumed that - in Yangon(low endemic area) 60% of patients are from urban and 40% are from rural.
For ACD - $65 * 60\% = 39(\text{urban})$, $65 * 40\% = 26(\text{rural})$

In Mandalay(median endemic area) 40% of patients are from urban and 60% are from rural.
For ACD - $636 * 40\% = 254(\text{urban})$, $636 * 60\% = 382(\text{rural})$

In Magway(high endemic area) 40% of patients are from urban and 60% are from rural.
For ACD - $1009 * 40\% = 404(\text{urban})$, $1009 * 60\% = 605(\text{rural})$

The number of patients from urban and rural areas of three endemic area detected from PCD is similar to ACD calculation.

For PCD

The direct costs contained traveling cost and time costs for patient. The time costs are estimated from their average wages.

Indirect costs contained traveling costs and time costs for relative who accompany with patient.

For ACD

In ACD, the patient did not need to go health center and so there was no traveling cost for patient. They only cost for loss of work because they spent the time for examined by health personnel.

Di Cont (PCD)												Di Cont (ACD)											
Trav. C																							
Ygn	#	Av. rate	TC Ygn	Mdy	#	Av. rate	TC Mdy	Mag	#	Av. rate	TC Mag	Time C											
U	514	100	51400		412	100	41200		516	100	51600	Ygn				Mdy			Mag				
R	343	50	17150		619	50	30950		1204	50	60200	U	39	250	9750		254	250	63500		404	200	80800
Time C												R	26	200	5200		382	150	57300		605	100	60500
Ygn				Mdy				Mag															
U	514	250	128500		412	250	103000		516	200	103200				14950				120800			141300	
R	343	200	68600		619	150	92850		1204	100	120400												
Indi. Cont												Av. Cont											
												230											
189.9371												140.0396											
Trav. C																							
Ygn	#	Av. rate	TC Ygn	Mdy	#	Av. rate	TC Mdy	Mag	#	Av. rate	TC Mag												
U	514	100	51400		412	100	41200		516	100	51600	Cont (Patient)											
R	343	50	17150		619	50	30950		1204	50	60200	L	M	H									
Time C												Base	546250	656800	812100								
Ygn				Mdy				Mag				ACD	212060	316730	382060								
U	514	250	128500		412	250	103000		516	200	103200	PCD	571640	866840	1064310								
R	343	200	68600		619	150	92850		1204	100	120400												
			531300				536000				670800												
Av. Cont			619.9533				519.8836				390												

Appendix 7

Calculation of Benefits for Patient Perspective

Calculation of benefits for patient side is calculated by using equation 20 which is explained in Chapter 4. The productivity weight is calculated by following.

the productivity weight is calculated from estimating the age earnings profile. It is also assumed that entry to the labor force occurs at age 14 with an income of one half the mean for all age groups. Income then increases at regular increments up to the age of thirty. In addition per capita productivity is projected to grow by 2.5 percent per annum. The income expected at age thirty is divided by the expected income of all age groups expressed in terms of productivity weights.

The AO, AD, PD, DP values are got from literature(Htoon M.T., 1993).

The survival rate is calculated from subtracting the case fatality rate from one.

$$SR = 1 - CFR$$

SR = Survival Rate

CFR = Case Fatality Rate

CFR for leprosy is 0.001 in literature (Htoon M.T., 1993).

Incidence is calculated from number of early cases detected in three scenarios divided by population in that area.

The number of early cases detected in three scenarios in three different endemic areas are available in Table 4.2.

The number of population in three different endemic areas are as following.

Area	Population
1. Yangon(Low endemic area)	4825,918
2. Mandalay(Median endemic area)	5576,329
3. Magwe(High endemic area)	3896,254

From these two figures, incidence is calculated by followings.

$$\text{Incidence} = \frac{\text{Number of early case detected in that area}}{\text{Population at that area}} * 1000$$

Age Gp	Income		Age	Inc(2.5%)	INCOME		AO-AD	Year	Y*I*SR/1+R		
0-14	0		14	4287.5	4287.5		29	0	6339.1545		
15-20	5400		15	107.1875	4394.6875		30	1	6037.29		
21-25	7200		16	109.86719	4504.5547		31	2	5749.8		
25-30	15000		17	112.61387	4617.1686		32	3	5476		
31-50	18000		18	115.42921	4732.5978		33	4	5215.2381		
51-55	18000		19	118.31494	4850.9127		34	5	4966.8934		
55-60	5000		20	121.27282	4972.1855		35	6	4730.3747		
60>	0		21	124.30464	5096.4902		36	7	4505.1188		
Total	68600		22	127.41225	5223.9024		37	8	4290.5893		
Av. Inc	8575		23	130.59756	5354.5		38	9	4086.2755		
1/2 Mean	4287.5		24	133.8625	5488.3625		39	10	3891.691		
			25	137.20906	5625.5715						
S. rate			26	140.63929	5766.2108			Sum	55288.425		
	CFR	0.001	27	144.15527	5910.3661						
	S. rate	1-CFR	28	147.75915	6058.1253						
	S.rate	0.999	29	151.45313	6209.5784		VCD				
			30	155.23946	6364.8178			ACD	PCD		
							Ygn	568245.44	6525657.3		
			P. Weight	p18/11	0.7422528		Mdy	4790852	6313771.9		
							Mag	10886682	15132375		
	AO	29									
	AD	39					VCD				
	PD	16						L	M	H	
	DP	50					Base	7093902.7	11104624	26019057	
	IN						ACD	8028758.1	12564089	29424693	
	SR	0.999					PCD	7011415.5	10176595	23544295	
	R	0.05									
	Y	0.74									
	I	8575									
	Incidence	(16%Disab)					Incidence	(16%Disb)			
		ACD	PCD				L	M	H		
	Ygn	0.0128473	0.1475367				Base	0.160384	0.2510612	0.5882573	
	Mdy	0.108315	0.1427462				ACD	0.1815199	0.2840578	0.6652544	
	Mag	0.2461339	0.3421235				PCD	0.1585191	0.2300797	0.5323062	

Appendix 8

Estimation of Early Case Detection for Sensitivity Analysis

The estimation of early cases detected by ACD and PCD is the same calculation as Appendix 2. According to the assumption made it earlier, the percentage of ACD should be more than 84% while those of PCD should not exceed 84%. The sensitivity analysis should be done within this range.

For the best combination (ACD 99% and PCD 84% Combination)

In low endemic area,

$$\text{ACD Early Case Detection} = 65 * 99\% = 64$$

$$\text{Total Early Case Detection} = 922 * 84\% = 774.48(774)$$

$$\text{Therefore PCD Early Case Detection} = 774 - 64 = 710$$

$$\begin{aligned} \text{PCD Early Case Detection}(\%) &= 710/857 * 100 \\ &= 82.8\% \end{aligned}$$

In median endemic area,

$$\text{ACD Early Case Detection} = 636 * 99\% = 630$$

$$\text{Total Early Case Detection} = 1667 * 84\% = 1400.2 (1400)$$

$$\text{Therefore PCD Early Case Detection} = 1400 - 630 = 770$$

$$\begin{aligned} \text{PCD Early Case Detection}(\%) &= 770/1031 * 100 \\ &= 74.68\% \end{aligned}$$

In high endemic area,

$$\text{ACD Early Case Detection} = 1009 * 99\% = 999$$

$$\text{Total Early Case Detection} = 2729 * 84\% = 2292$$

$$\text{Therefore PCD Early Case Detection} = 2292 - 999 = 1293$$

$$\begin{aligned} \text{PCD Early Case Detection}(\%) &= 1293/1720 * 100 \\ &= 75.17\% \end{aligned}$$

From those percentage, the early cases detected in three different scenarios are estimated as follows.

1. Baseline Scenario

The number of early cases are calculated by -

In low endemic area,	For ACD	65 * 99%	=	64
	For PCD	857 * 82.8%	=	710

	Total		=	774

In median endemic area,	For ACD	636 * 99%	=	630
	For PCD	1031 * 74.68%	=	770
				1400
	Total		=	1400
In high endemic area,	For ACD	1009 * 99%	=	999
	For PCD	1720 * 75.17%	=	1293
				2292
	Total		=	2292

2. ACD alone Scenario

In ACD alone scenario assumed that all the cases detected in 1992 were detected only by ACD. Therefore the number of early cases are estimated by multiplying the total number of new cases detected in 1992 into 99%.

In low endemic area	-	922 * 99%	=	913
In median endemic area	-	1667 * 99%	=	1650
In high endemic area	-	2729 * 99%	=	2702

3. PCD alone Scenario

In PCD alone scenario assumed that all the cases detected in 1992 were detected only by PCD. Therefore the number of early cases are estimated by multiplying the total number of new cases detected in 1992 into the percentage detected by PCD calculated in earlier.

In low endemic area	-	922 * 82.80%	=	763
In median endemic area	-	1667 * 74.68%	=	1245
In high endemic area	-	2729 * 75.17%	=	2051

For the worst combination(ACD 90% and PCD --% Combination)

In low endemic area,

ACD Early Case Detection	=	65 * 90%	=	59
Total Early Case Detection	=	922 * 84%	=	774.48(774)
Therefore PCD Early Case Detection	=	774 - 59	=	715
PCD Early Case Detection(%)	=	715/857 * 100		
			=	83.4%

In median endemic area,

ACD Early Case Detection	=	636 * 90%	=	572
Total Early Case Detection	=	1667 * 84%	=	1400.2 (1400)
Therefore PCD Early Case Detection	=	1400 - 572	=	828
PCD Early Case Detection(%)	=	828/1031 * 100		
			=	80.31%

In high endemic area,

ACD Early Case Detection = $1009 * 90\% = 908$

Total Early Case Detection = $2729 * 84\% = 2292$

Therefore PCD Early Case Detection = $2292 - 908 = 1384$

PCD Early Case Detection(%) = $1384/1720 * 100$
 = 80.47%

From those percentage, the early cases detected in three different scenarios are estimated as follows.

1. Baseline Scenario

The number of early cases are calculated by -

In low endemic area, For ACD $65 * 90\% = 59$

For PCD $857 * 83.4\% = 715$

 Total = 774

In median endemic area, For ACD $636 * 90\% = 572$

For PCD $1031 * 80.3\% = 828$

 Total = 1400

In high endemic area, For ACD $1009 * 90\% = 908$

For PCD $1720 * 80.47\% = 1384$

 Total = 2292

2. ACD alone Scenario

In ACD alone scenario assumed that all the cases detected in 1992 were detected only by ACD. Therefore the number of early cases are estimated by multiplying the total number of new cases detected in 1992 into 95%.

In low endemic area - $922 * 90\% = 830$

In median endemic area - $1667 * 90\% = 1500$

In high endemic area - $2729 * 90\% = 2456$

3. PCD alone Scenario

In PCD alone scenario assumed that all the cases detected in 1992 were detected only by PCD. Therefore the number of early cases are estimated by multiplying the total number of new cases detected in 1992 into the percentage detected by PCD calculated in earlier.

In low endemic area - $922 * 83.40\% = 769$

In median endemic area - $1667 * 80.31\% = 1339$

In high endemic area - $2729 * 80.47\% = 2196$

CURRICULUM VITAE

- | | |
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Snake-Bite Management in Rural
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