IMPROVING MANAGEMENT IN EPILEPSY

Community based management program in Morang District, Nepal, involving Village Health Worker.

Why is epilepsy a public health concern in Nepal ?

- **Not much of hard data but reported prevalence are:-**
  - **10 - 15 per thousand (Text books)**
  - **4.2 - 22.2 per thousand in different Indian studies**
  - **7 per thousand in Morang district (program area)**
- **Socially debilitating illness with whole family suffering.**
- **Gradually causes progressive brain**

Why did I choose it ?

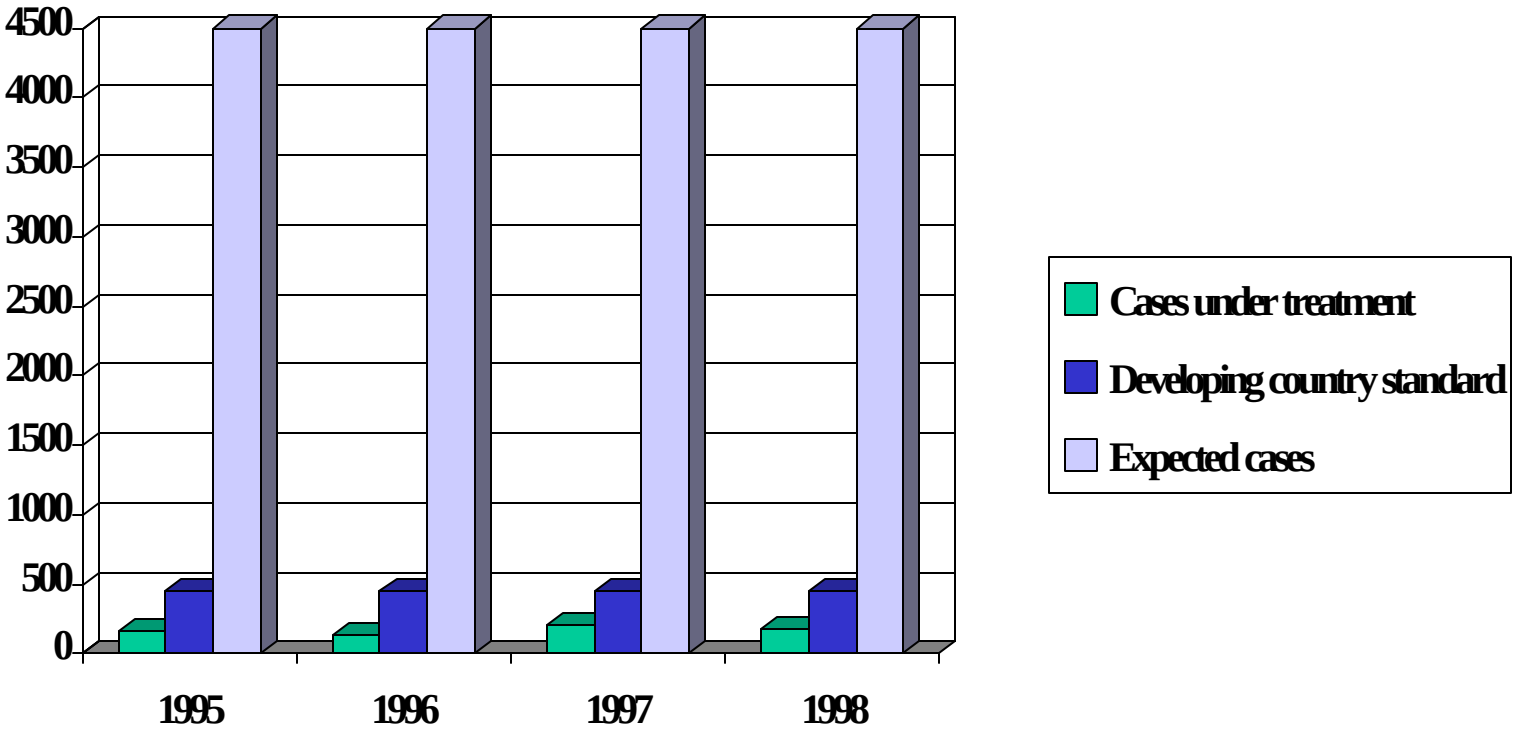
- **Low cost community based program is feasible**
- **My field of interest**
- **Easy and effective entry point for introduction of general mental health.**

Problem statement.

People suffering from epilepsy in Morang district of Nepal are not utilizing the health services for treatment.

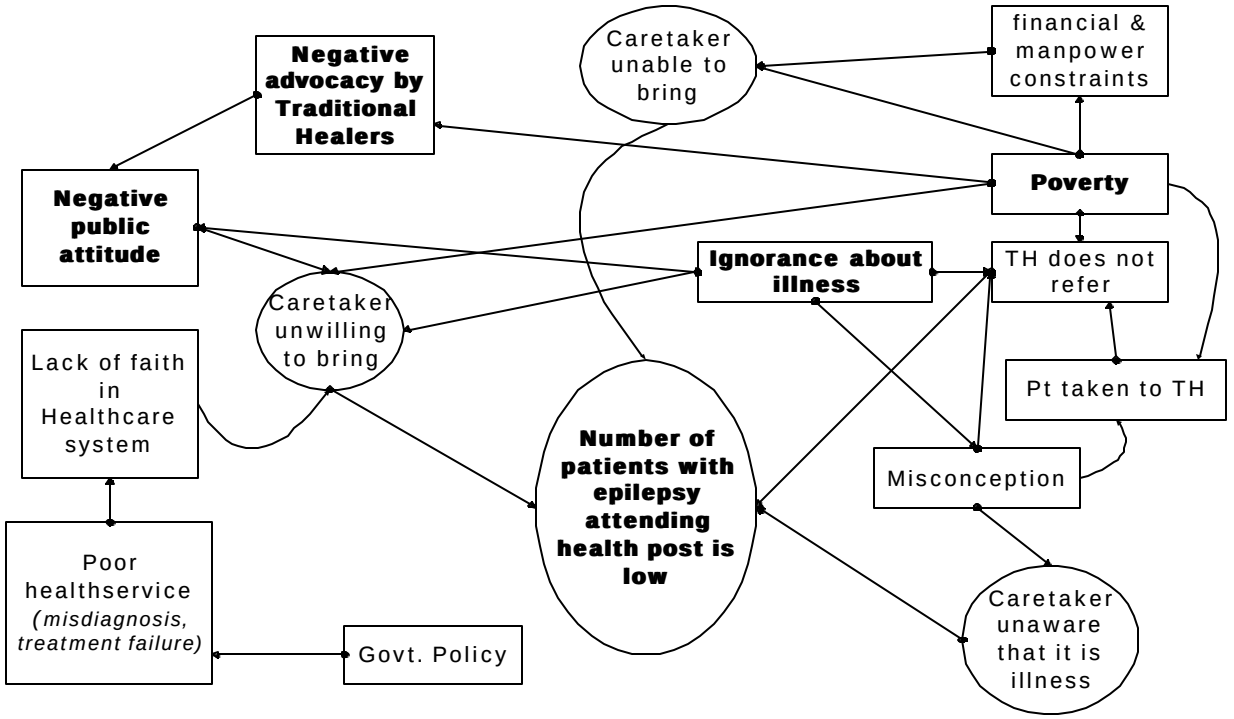
Number of patients actually under treatment

(source: Annual Report, Mental Health Project, 1998)



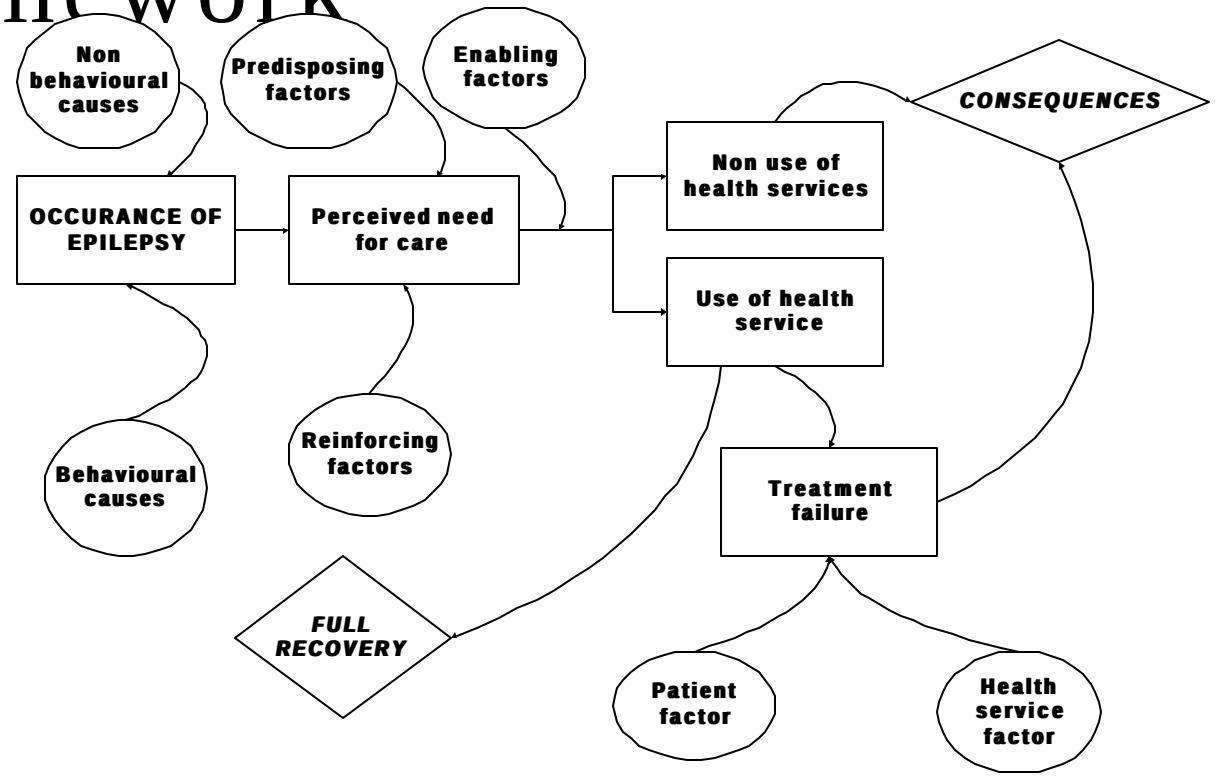
What is the root cause ?

Causal web



What influences utilization ?

Conceptual Framework



Adaptation of Determinants of health service utilization to explain the dynamics affecting care of epileptics in the community (Anderson & Newman 1973)

What could be done to improve the situation ?

- Increase community awareness - information flooding
- Desensitization of the community
- Increment of social pressure
- Involvement of the community
- Involvement of other healing systems of the community
- Strengthening the health delivery system : Involvement of VHW.

What do I want to do ?

Empowerment and mobilization of village health worker in the use of phenobarbitone to bring about better coverage and quality care of epileptics in Kerabari Health Post of Morang District.

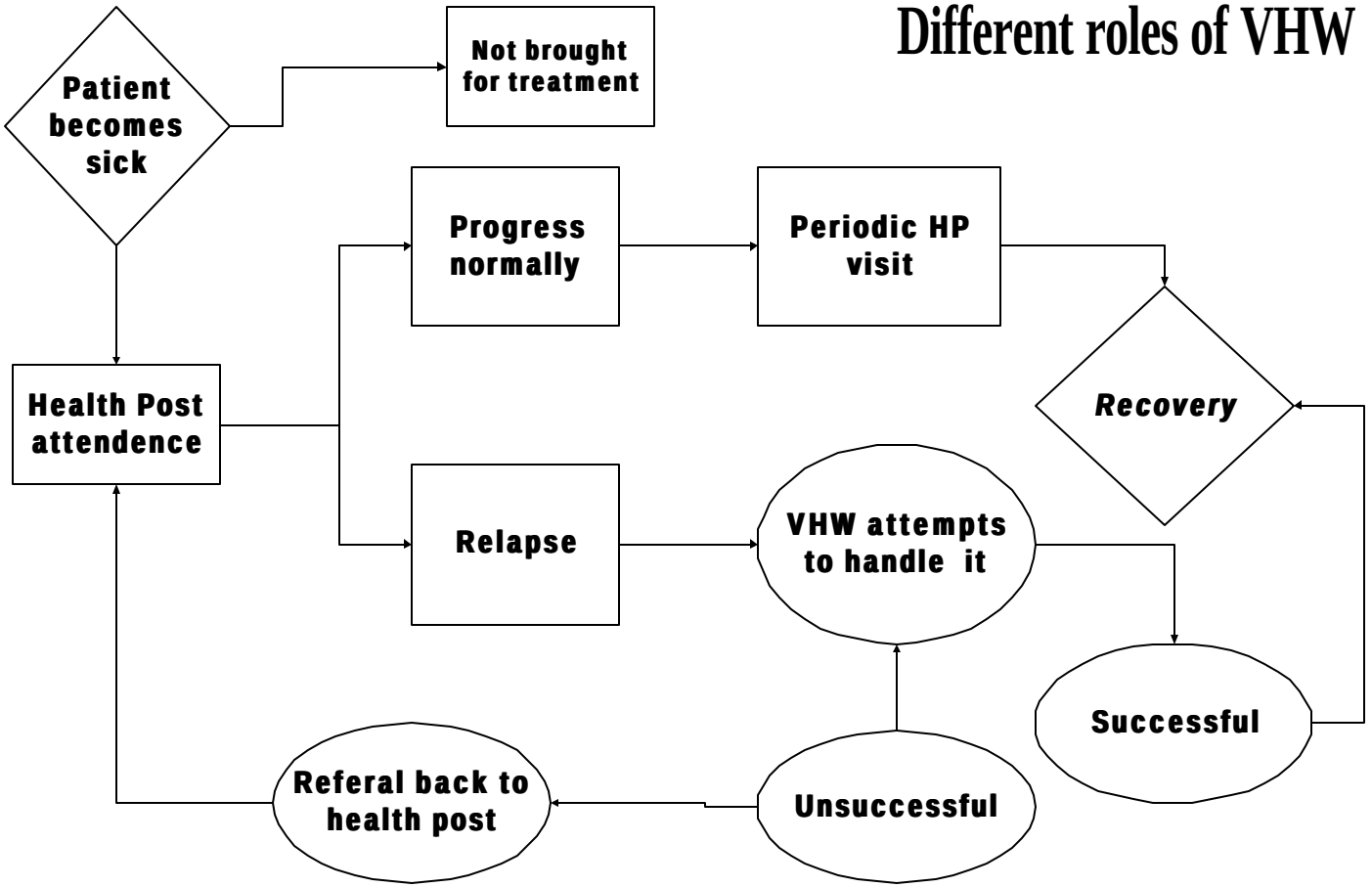
Operational Definitions

- **Empowerment:** 'to give power to'. The VHWs will be given some curative role under supervision.
- **Mobilization:** 'encouragement to take action.' VHWs will be more involved in active case-finding.
- **Quality care:** adherence to protocol leading to better control of fits.
- **Phenobarbitone:** cheap, available at health post, present in essential drug list.
- **Better coverage:** increase in the % of

General objectives

- **Improve health care in relation to epilepsy.**
- **Increase community awareness.**
- **Reduce misconceptions.**
- **Reduce taboo attached to the illness in the community.**

How can VHW's bring about change ?

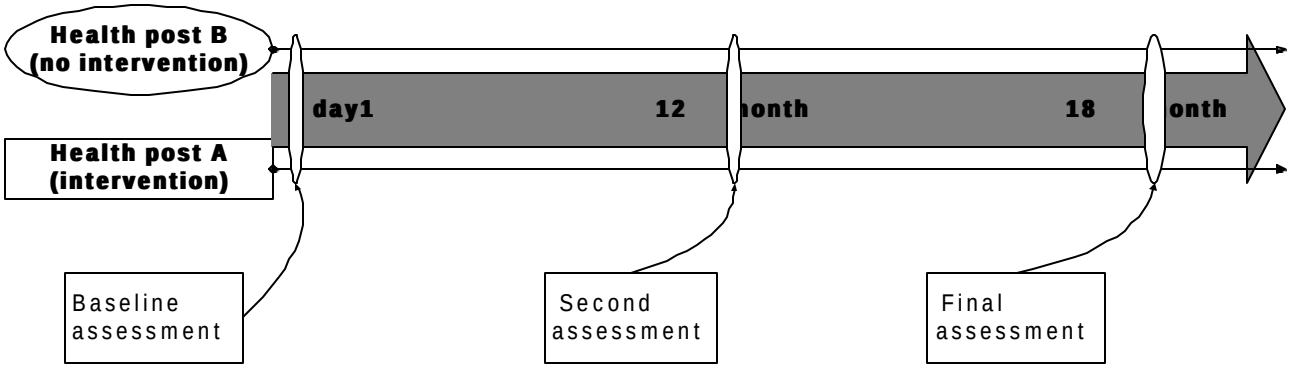


Specific Objectives

- **To increase coverage.**
- **To provide quality care.**
- **To minimize defaulter rate.**
- **Increase Quality of Life of patients.**

STUDY DESIGN

(Quasi experimental)



Study site

- **District : Morang (in eastern Nepal)**
- **Health post: Kerabari**
- **Population coverage: 23,687**
- **Manpower:**
  - **Health Assistant -- 1**
  - **Community Medical Auxiliary -- 2**
  - **ANM --1**
  - **VHW -- 6**

How to implement it ?

Strategy of implementation

- **Horizontally integrated at the level of District Public Health Office.**
- **Ultimate service providers are DPHO staff.**

Components of training

- **Methods of case finding**
- **Screening criteria**
- **Methods of treatment**
- **When to refer**
- **Counseling techniques**
- **Communication skills**

Pre training preparations

- **Curriculum design.**
- **Formation of screening guidelines.**
- **Formulation of diagnostic guidelines and treatment protocol.**
- **Development of T/L materials**
  - **flip chart**
  - **brochure**
  - **reading material for trainer**

Human Resource & Technical Requirements

- **Trainer - Health assistant of the health post and master trainer from DPHO.**
- **Supervisor / coordinator - to be borrowed from DPHO**
- **Data collectors (to be hired)**
- **Audio visual equipment - (to be hired)**

Information & Recording

- History sheet
- Continuation sheet
- Referral slip
- QOL questionnaire
- Monthly reporting form
- Information from the health post collected at the DPHO.
- Local data-base maintained by supervisor.
- A copy of information from the DPHO sent to

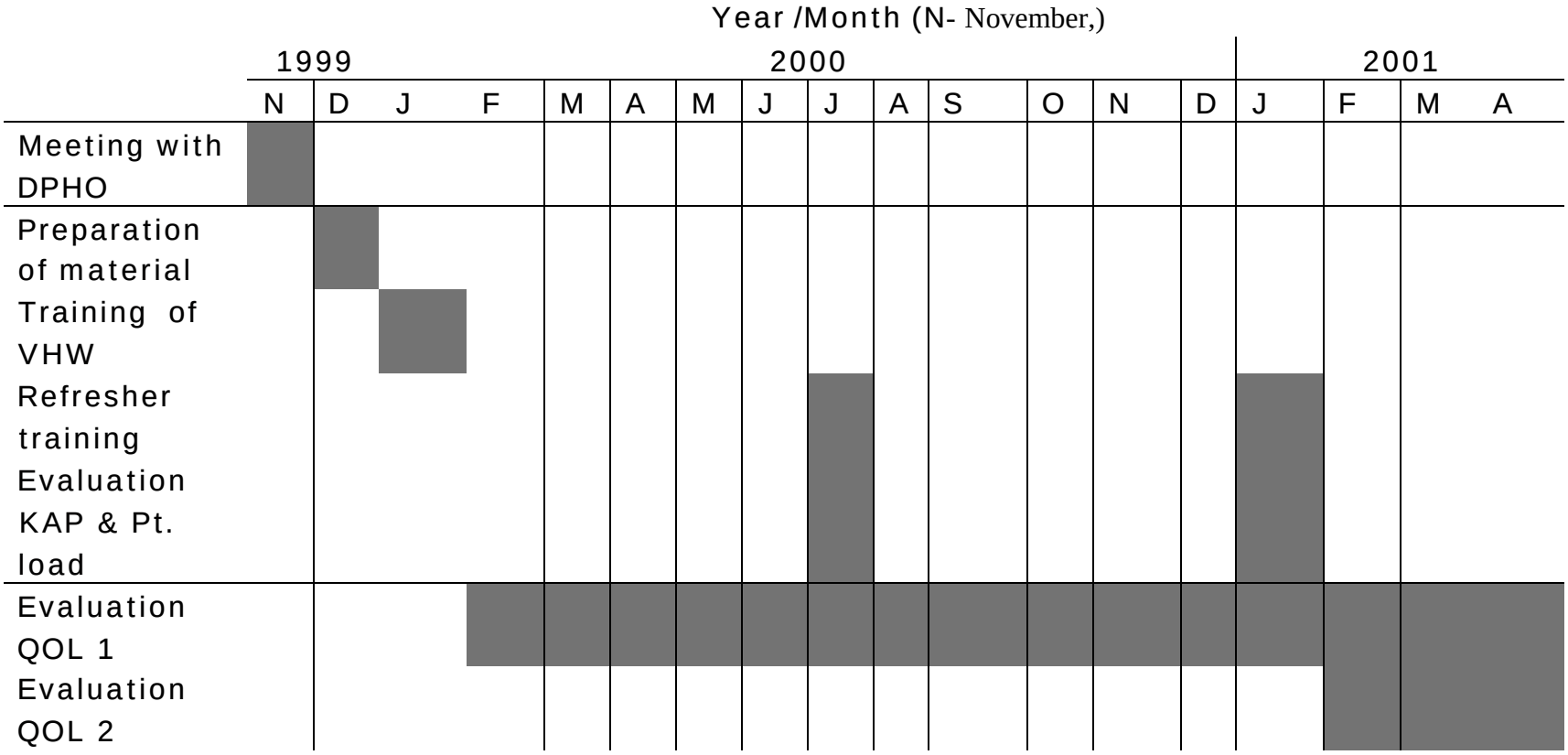
Evaluation & Expected Outcome

- ***PROCESS***
  - **KAP of VHWs -- fluctuates with net rise**
- ***OUTCOME***
  - **% of adherence to protocol**
  - **% of coverage**
  - **Change in QOL of patients - QOL score gets better**
  - **Seizure response- about 1/3 of patients symptom free from 6 months onwards**

Budget

- VHW training 6,000
- VHW refresher 7,000
- Material development 25,000
- Seed money for CDP 1,000
- transportation 18,000
- Salary 45,000
- Contingency 8,000
- TOTAL RS. 110,000
  ($ 1692)

Activity plan of proposed study



What is the motivation for VHW ?

Intrinsic factor

Change of role from health education to 'medicine giving' role which has higher status . in the community.

Extrinsic factor

Carrying bag

Repeated refresher training

Ethical issues

- **Right of a person to choose**
  - **to be or not to be treated**
  - **choice of treatment**
- **If patient prefers other medication, he will be referred to district headquarters**
- **Poor patients -- DPHO rules prevails**

Sustainability

- DPHO manpower is trained
- Technical support is institutionalized with Dept of Psychiatry
- Practically no running cost

Anticipated hurdles

- Working with Government System is a slow process.
- Stigmatized illness: so the denial (normal) of the patient as to the existence of the condition may be a problem.
- Traditional healer community may turn against the program.

Supportive Activities

- ***AIMS***
- **increase community awareness**
- **decrease misconceptions**
- **decrease taboo**

- ***ACTIVITIES***
- **training for community leaders**
- **training for other levels i.e. FCHV's, TBA's.**
- **training for traditional healers**
- **training for school teachers**

Data exercise

A cross sectional survey of Quality of Life of patients with epilepsy

Objectives (data exercise)

- ***General Objective***
  - **Test the 'DUKE Health Profile' in patients and normal population**
- ***Specific objectives***
  - **To access the QOL of epileptic patients**
  - **To access the QOL of normal population.**

Duke Health Profile

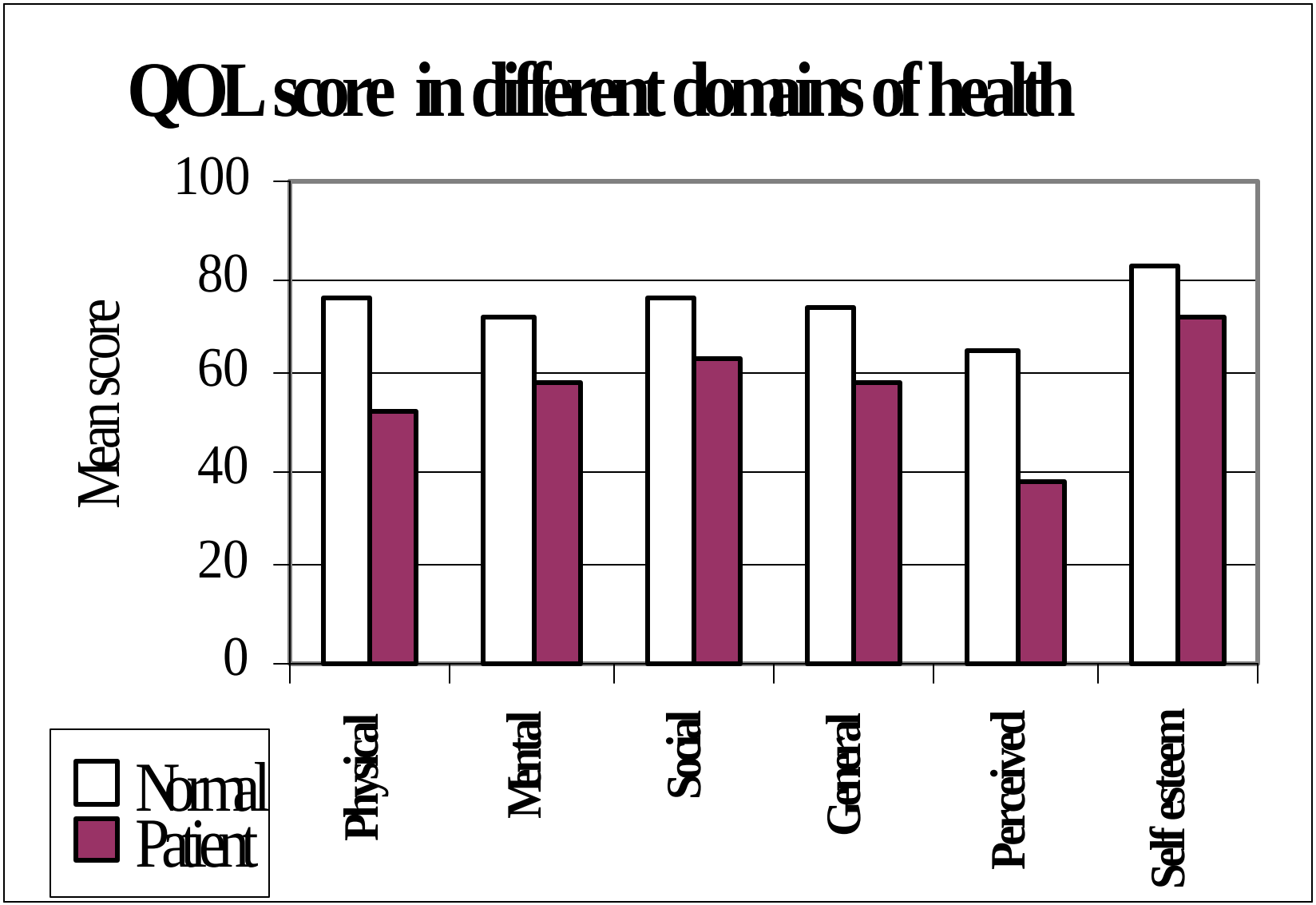
- **17 point Questionnaire to be used in primary care setting.**
- **6 health scores - Physical, Mental, Social, General, Perceived health and Self esteem.**
- **5 dysfunction scores - Anxiety, Depression, Pain, Disability, Anxiety-Depression.**

Sample selection,size and technique

- Purposive sampling, 30 in each group.
- **Patient population:** consecutive patients attending neurology OPD at Korat Hospital.
  - Inclusion: onset of illness between 5 - 30 years.
- duration of illness more than 6 months
  - exclusion: severely ill.
- Patients who did not give consent

Findings

- **1/3 of sample in both groups were midliners.**
- **The mean QOL score was lower in normal population than optimum.**
- **The mean QOL score was lower in patients than in normal.**
- **Age showed negative correlation with all six domains of QOL.**
- **Anxiety and depression showed negative**


QOL score in different domains of health
Mean score
100
80
60
40
20
0
Physical
Mental
Social
General
Perceived
Self esteem
Normal
Patient

Correlation between QOL scores in the different domains among themselves in both groups

Domain		A	B	C	D	E	F	G
Physical	N	1.000	.263	.395*	.856**	.543**	.331	-.465**
	P	*1.000*	*.510***	*.303***	*.783***	*.494***	*.467**	*-.449***
Mental	N	.263	1.000	.095	.596**	.303	.558**	-.212
	P	*.510***	*1.000*	*.439**	*.851***	*.465**	*.787***	*-.186*
Social	N	.395*	.095	1.000	.651**	.118	.465**	-.298
	P	*.303*	*.439**	*1.000*	*.709***	*.259*	*.771***	*-.221*
General	N	.856**	.596**	.651**	1.000	.493**	.598**	-.477**
	P	*.783***	*.851***	*.709***	*1.000*	*.527***	*.856***	*-.363*
Perceived	N	.543**	.303	.118	.493**	1.000	.354	-.416*
	P	*.494***	*.456**	*.259**	*.527***	*1.000*	*.352*	*-.099*
Self esteem	N	.331	.558**	.465**	.598**	.354	1.000	-.451*
	P	*.467**	*.787***	*.771***	*.856***	*.352*	*1.000*	*-.267*
AGE	N	-.465**	-.212	-.298	-.477**	-.416*	-.451*-	1.000
	P	*-.449**	*-.186*	*-.221*	*-.363*	*-.099*	*-.267*	*1.000*

** Correlation is significant at ae 0.01 level

* Correlation is significant at the 0.05 level

Limitations & lessons learned

- ***Limitations***
- **Sample size: small and nonrandomized so cannot generalize findings.**
- **Two groups not identical: so cannot 'compare'**
- ***Lessons learned***
- **Questions have to be reevaluated in the cultural context.**