

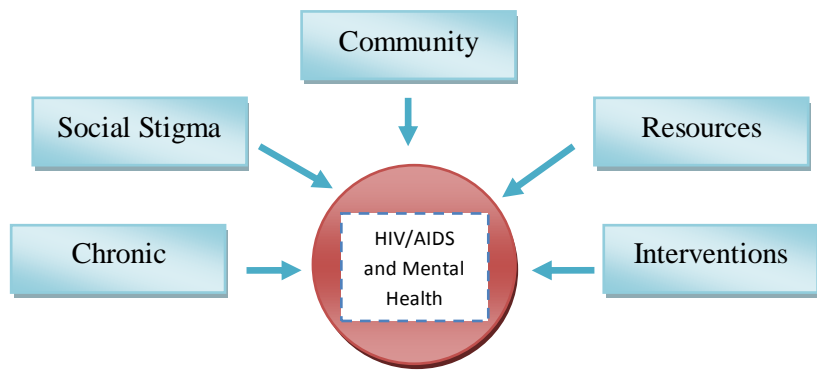


Plenary Speeches

3. Socio-Economic Impact of HIV/AIDS and Mental Health

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HIV/AIDS and Mental Health Common Features



Millennium Development Goals Goal 6 Combat HIV/AIDS, malaria and other diseases

Halt and reverse spread of HIV/AIDS	Low prevalence	High prevalence	Low prevalence	Low prevalence	Low prevalence	Low prevalence
Halt and reverse spread of Tuberculosis	Low mortality	High mortality	Low mortality	Moderate mortality	Moderate mortality	Low mortality
	Africa			Asia		
	Nor then	Sub-Saharan	Eastern	South-Eastern	Southern	Western



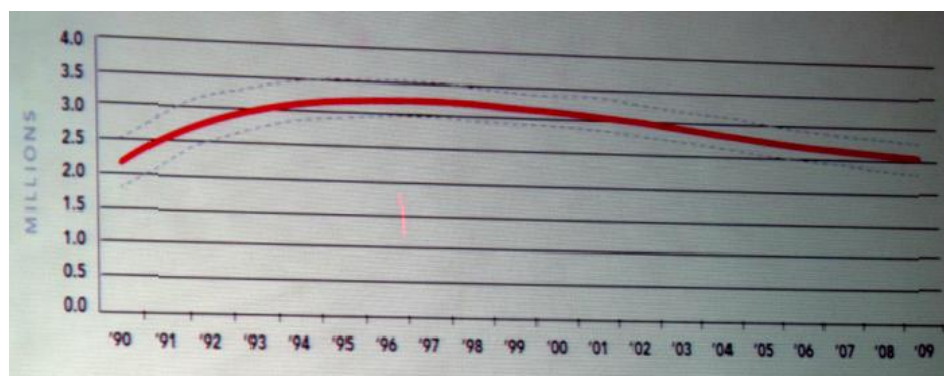
HIV/AIDS: Global Scenario

Total		Adults and children living with HIV	Adults and children newly infected with HIV	%Adult prevalence (15-49 years)	AID-related deaths among adults and children
	2009	33.3 million (31.4-35.3 million)	2.6 million (2.3-2.8 million)	0.8 (0.7-0.8)	1.8 (1.6-2.1 million)
	2001	28.6 million (27.1-30.3 million)	3.1 million (2.9-3.4 million)	0.8 (0.7-0.8)	1.8 (1.6-2.0 million)

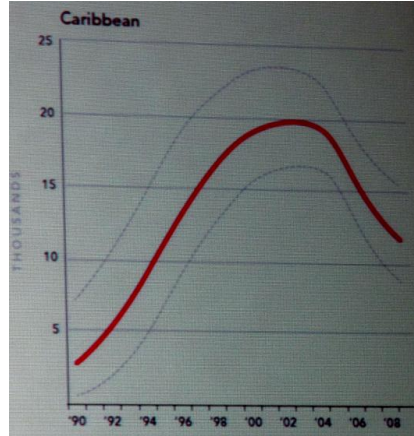
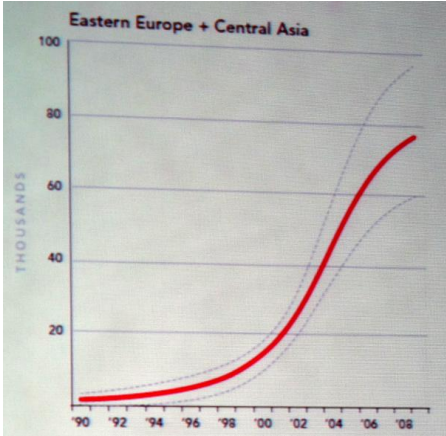
HIV in Africa: 2009

Sub-Saharan Africa		People living with HIV	People newly infected with HIV	Children living with HIV	AID-related deaths
	2009	22.5 million (20.9-24.2 million)	1.8 million (1.6-2.0 million)	2.3 (1.4-3.1)	1.3 (1.1-1.5 million)
	2001	20.3 million (18.9-21.7 million)	2.2 million (1.9-2.4 million)	1.8 (1.1-2.5)	1.8 (1.2-1.6 million)

No. of People Newly Infected with HIV



Annual AIDS-Related Deaths (1990-2009)



HIV in Asia: 2009

Asia		People living with HIV	People newly infected with HIV	Children living with HIV	AID-related deaths
	2009	4.9 million (4.5-5.5 million)	360 000 (300 000-430 000)	160 000 (110 000-210 000)	300 000 (260 000-340 000)
	2001	4.2 million (3.8-4.6 million)	450 000 (410 000-500 000)	100 000 (69 000-140 000)	250 000 (220 000-300 000)

HIV/AIDS: treatment coverage in Low and Middle Income Countries (2010)



HIV Spending in LMIC

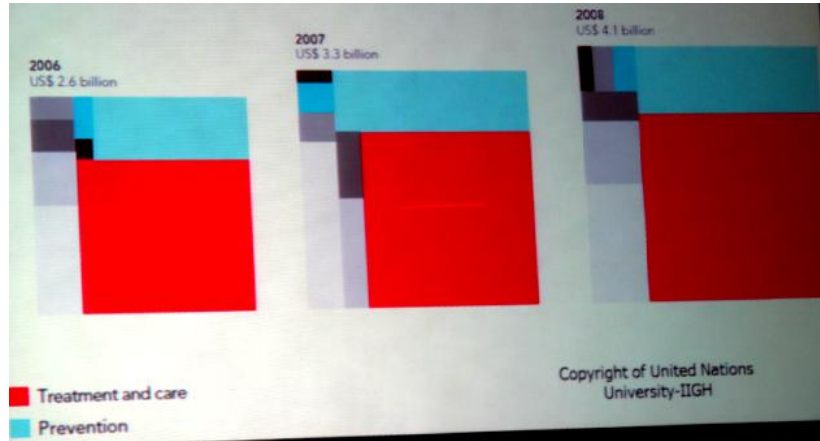
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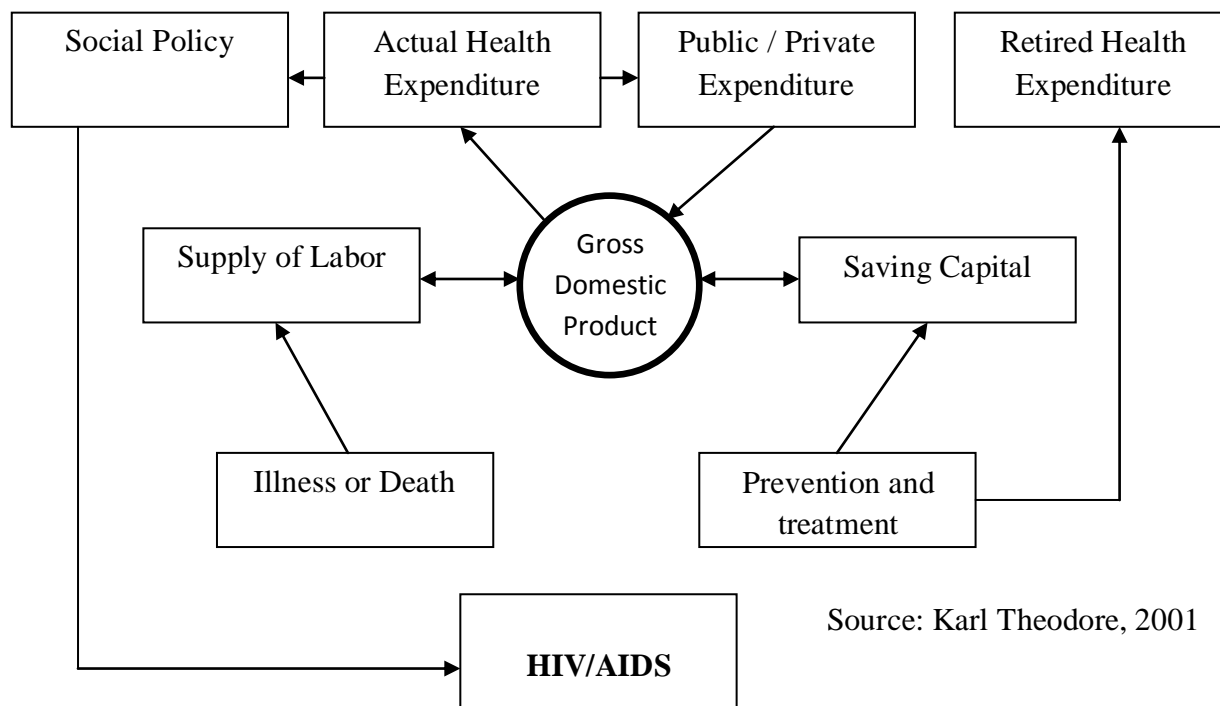
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Socio-Economic Impact of HIV/AIDS: Conceptual Framework

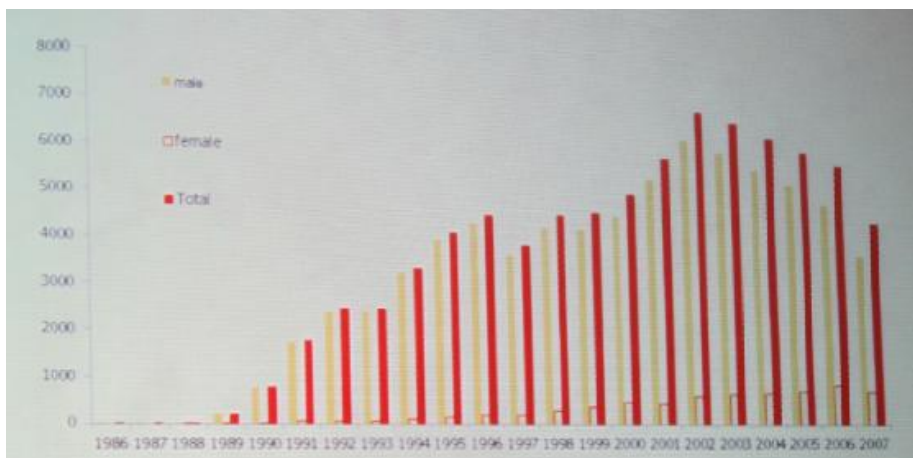


Estimated and Projected loss of labor force in 2000 and 2020 (%)

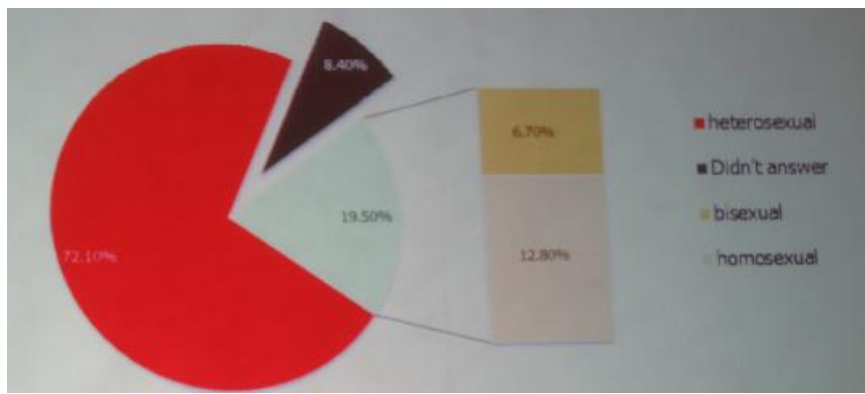
Country	2000	2020
Namibia	3.0	26.0
Botswana	6.6	23.2
Zimbabwe	6.9	22.7
Mozambique	2.3	20.0
South Africa	3.9	19.9
Kenya	3.9	16.8
Malawi	5.8	13.8
Uganda	12.8	13.7
Tanzania	5.8	12.7
Central African Republic	6.3	12.6
Cote d'Ivoire	5.6	11.4
Cameroon	2.9	10.7



HIV in Malaysia



HIV in Malaysia (N=300)



Mode of transmission by gender (Malaysia, 2007)

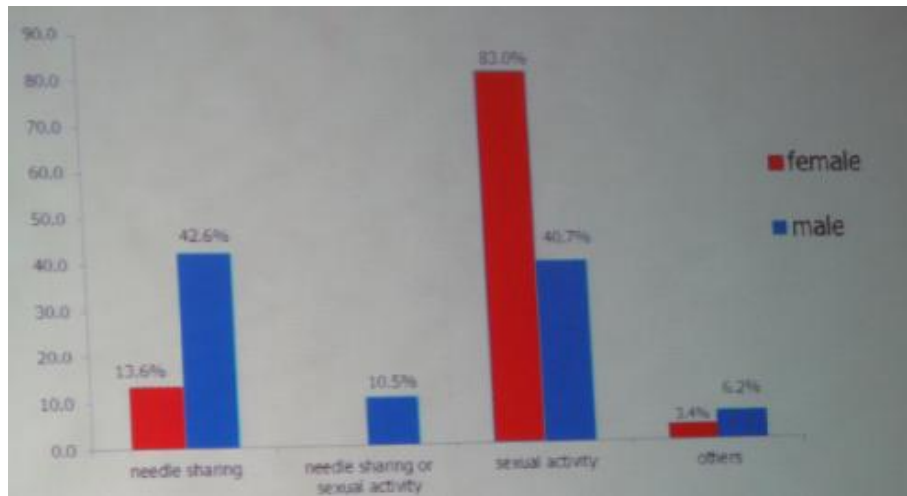
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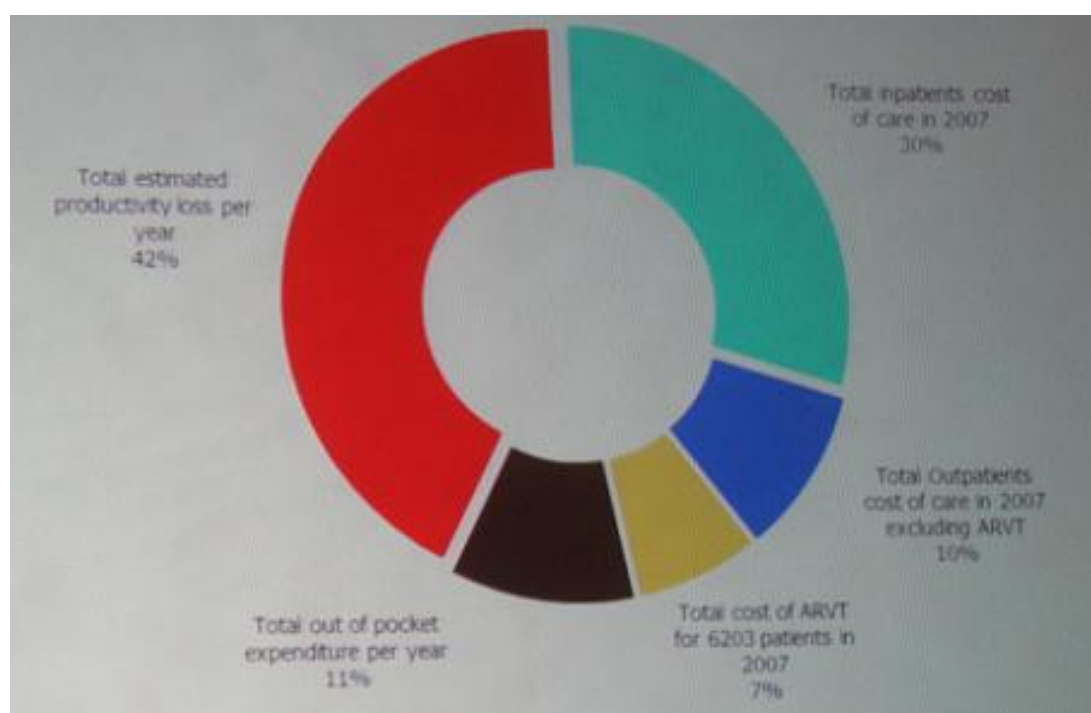




Economic burden of HIV in Malaysia (2007) (RM)

Description	Costing Type	Cost (RM)
Total inpatients cost of care in 2007	Direct	201,605,633
Total outpatients cost of care in 2007	Direct	64,104,951
Total cost of ARVT for 6203 patients in 2007	Direct	50,332,693
Total out of pocket expenditure per year	Direct	72,612,720
Total estimated productivity loss per year	Indirect	287,364,839
Total	Direct + Indirect	474,415,203

National HIV/AIDS Cost Components (Malaysia, 2007)





DALYs associated with Mental Health (2008): Global

	DALYs (millions)	% mental health mental, world
All neuropsychiatric disorder	199	
Unipolar depressive disorders	65	32.9
Bipolar affective disorder	14	7.2
Schizophrenia	17	8.4
Epilepsy	8	3.9
Alcohol use disorders	24	11.9
Alzheimer and other dementias	11	5.6
Parkinson disease	2	0.9
Multiple sclerosis	2	0.8
Drug use disorders	8	4.2
Post-traumatic stress disorder	3	1.7
Obsessive-Compulsive disorder	5	2.6
Panic disorder	7	3.5
Insomnia (primary)	4	1.8
Migraine	8	3.9

Global Cost of Mental Health 2010-2030 (USD billion)

	Low-and Middle-Income countries			High- Income countries			World		
	Direct Cost	Indirect Cost	Total cost of illness	Direct Cost	Indirect Cost	Total cost of illness	Direct Cost	Indirect Cost	Total cost of illness
2010	287	583	870	536	1,088	1,624	823	1,671	2,493
2030	697	1,416	2,113	1,298	2,635	3,933	1,995	4,051	6,046



Key messages in Mental Health Atlas 2011 (WHO)

- **Insufficient** Resources to treat and prevent mental disorder
 - Global spending: Less than USD 2 per person per year
 - LIC: Less than USD 0.25 per person per year
 - Global: Less than 3% of Government Health Budget is allocated for Mental Health
 - More than half of the world population lives in a country with one or less psychiatrists per 200,000
- Resources for Mental Health is **inequitable** distributed
 - Only 36% of people in LIC covered by mental health legislation vs. 92% HIC
 - Outpatient mental health facilities are 58 times more likely to be found in HIC vs. LIC
 - User/Consumer organization: 83% of HIC vs. 49% in LIC
- Resources for Mental Health are **inefficiently** utilized
 - Global: 63% of mental health beds are in mental hospitals and 67% of mental health spending is in mental hospitals
- **Institutional care** for mental disorders is slowly decreasing
 - Decrease of mental hospital beds between 2005-2011



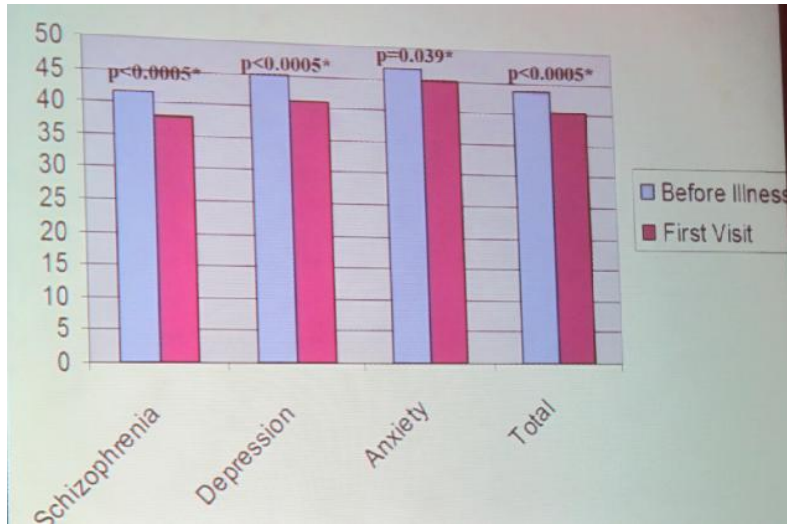
Leading Causes of Diseases Burden, Malaysia 2000

TOTAL DALY Status & Rank Order			
Rank No		DALY Total	% Total
1	Ischemic Heart diseases	278,733	9.8%
2	All mental illness	206,898	7.3%
3	Cerebrovascular Disease/stroke	180,431	6.4%
4	Road Traffic Injuries	162,736	5.7%
5	All cancers	137,675	4.9%
6	Septicemia	127,714	4.5%
7	Diabetes Mellitus	103,449	3.7%
8	Acute Lower Respiratory tract infections	87,539	3.1%
9	Hearing loss	83,560	3.0%
10	Other respiratory disease	82,032	2.9%
11	Asthma	61,005	2.2%
12	Chronic Obstructive pulmonary disease	60,728	2.1%
13	Cirrhosis	54,687	1.9%
14	Other Cardiovascular diseases	51,315	1.8%

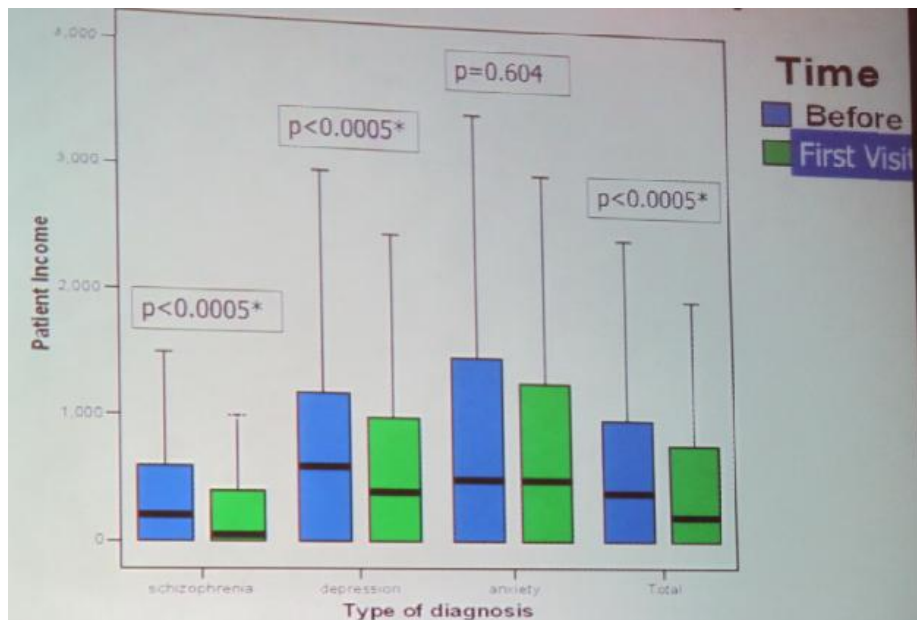
Socioeconomic Impact of Psychiatric Illness in Malaysia (2004)

- A total of 552 patients from 13 General Hospitals with Psychiatry Specialist Clinic were recruited.
- Case
 - Schizophrenia: 2558 patients
 - Depression: 192 patients
 - Anxiety: 102 patients
- Followed up for One year

Social Impact



Patient Income (Median)

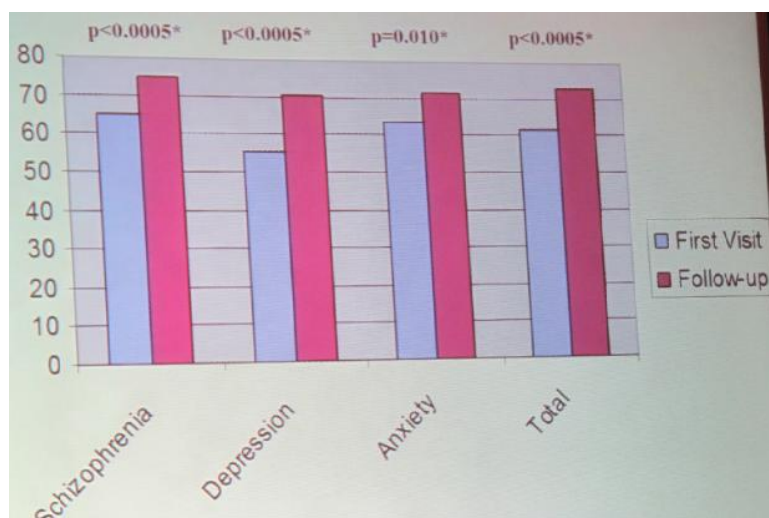


Household Debt

Characteristics	Schizophrenia	Depression	Anxiety	Total
Household (Before)				
Mean	142.97	178.66	129.29	152.86
Median	0	0	0	0
Minimum	0	0	0	0
Maximum	3,000.00	3,500.00	2,100.00	3,500.00
Household (First Visit)				
Mean	160.67	257.39	136.65	189.87
Median	0	0	0	0
Minimum	0	0	0	0
Maximum	3,000.00	5,000.00	2,100.00	5,000.00
P value (Wilcoxon Signed Ranks Test)	0.017*	0.006*	0.066	<0.0005*

*significant at p<0.05

Patients' SF-36 (Social Functioning Domain)



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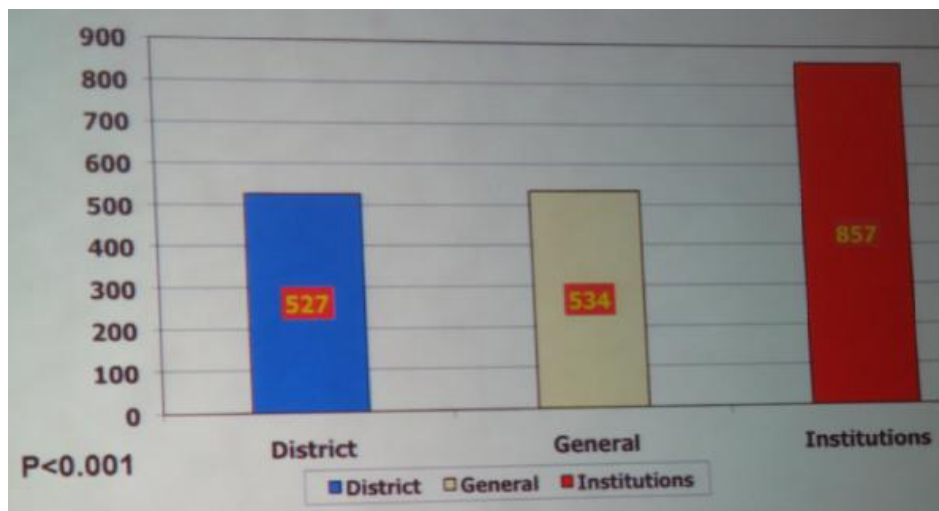




Cost per day of Stay (Schizophrenia) (RM) (2002)

Levels of care	Mean	N	SD	Minimum	Maximum
District	167.19	200	136.31	16.89	765.77
General	206.21	241	166.57	16.53	1,416.75
Institutions	644.08	224	687.80	67.76	6,750.77
Overall	341.97	665	470.27	16.53	6,750.77

CE Ratio: Cost per Unit HONOS Score



Community Roles in HIV/AIDS and Mental Health

- Involve community in treatment and prevention
- Incentives for community to participate
- Get community involved in Planning, Monitoring and Evaluation

Main issues

- Lack of community engagement
- Downplay the role of community
- Informal care not recognized
- Community role need resources



- Neglect of long term care (vs. Curative Care)

Community Role: Innovative Approach

- Design more elaborate community program
- Invest adequate resources
- Provide incentives for community involvement
- Monitor and share information

Conclusion

- Link between Chronic illness and Poverty
- HIV/AIDS and Mental Disorders are chronic diseases with significant impact on socio-economy
- Re-organize health systems in developing countries to response to these two conditions
- Increase in resources is important but efficient spending should be give a priority
- Community involvement is very important for sustainability