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Chronic Disease a Global Challenge : is it here to stay?

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Contents

- Magnitude of chronic diseases (diabetes mellitus and hypertension) in Malaysia
- The way forward : WHO Model - Innovative Care for Chronic Conditions
- What are the roles of healthcare providers?

Definition of Chronic Disease

- Health problems that require ongoing management over a period of years.
- Include
  - Non communicable disease –Cardiovascular disease, HPT, DM, cancer, etc
  - Long term mental disorders- depression and schizophrenia
  - Ongoing impairment- amputation, blindness, joint disorders
  - Certain communicable diseases , e.g. TB, HIV/AIDS

Magnitude of Chronic Diseases

- Global
  - 60% of global disease burden
  - 50% of them with chronic illness have multiple conditions
- USA
  - 133 million people, or almost half of all Americans
  - increase by more than 1% per year
- Malaysia ....

CHRONIC DISEASE BURDEN IN MALAYSIA

THE THIRD
NATIONAL HEALTH AND MORBIDITY SURVEY
2006

VOLUME II

INSTITUTE FOR PUBLIC HEALTH
NATIONAL INSTITUTES OF HEALTH
MINISTRY OF HEALTH
MALAYSIA
2008

National Health & Morbidity Survey (NHMS) III, 2006

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Burden of

Hypertension, Diabetes & Hyperlipidemias in MALAYSIA

NEW STRAITS TIMES

MONDAY JULY 30, 2007

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Malaysiaku Gemilang

nstonline www.nst.com.my

SICK NATION

Have you got NCD?

Chances are you may

7 out of 10 Malaysian adults suffer from a non-communicable disease (NCD) like diabetes, hypertension or cancer.

That's 11.6m of the 16m adults nationwide, and it's getting worse...

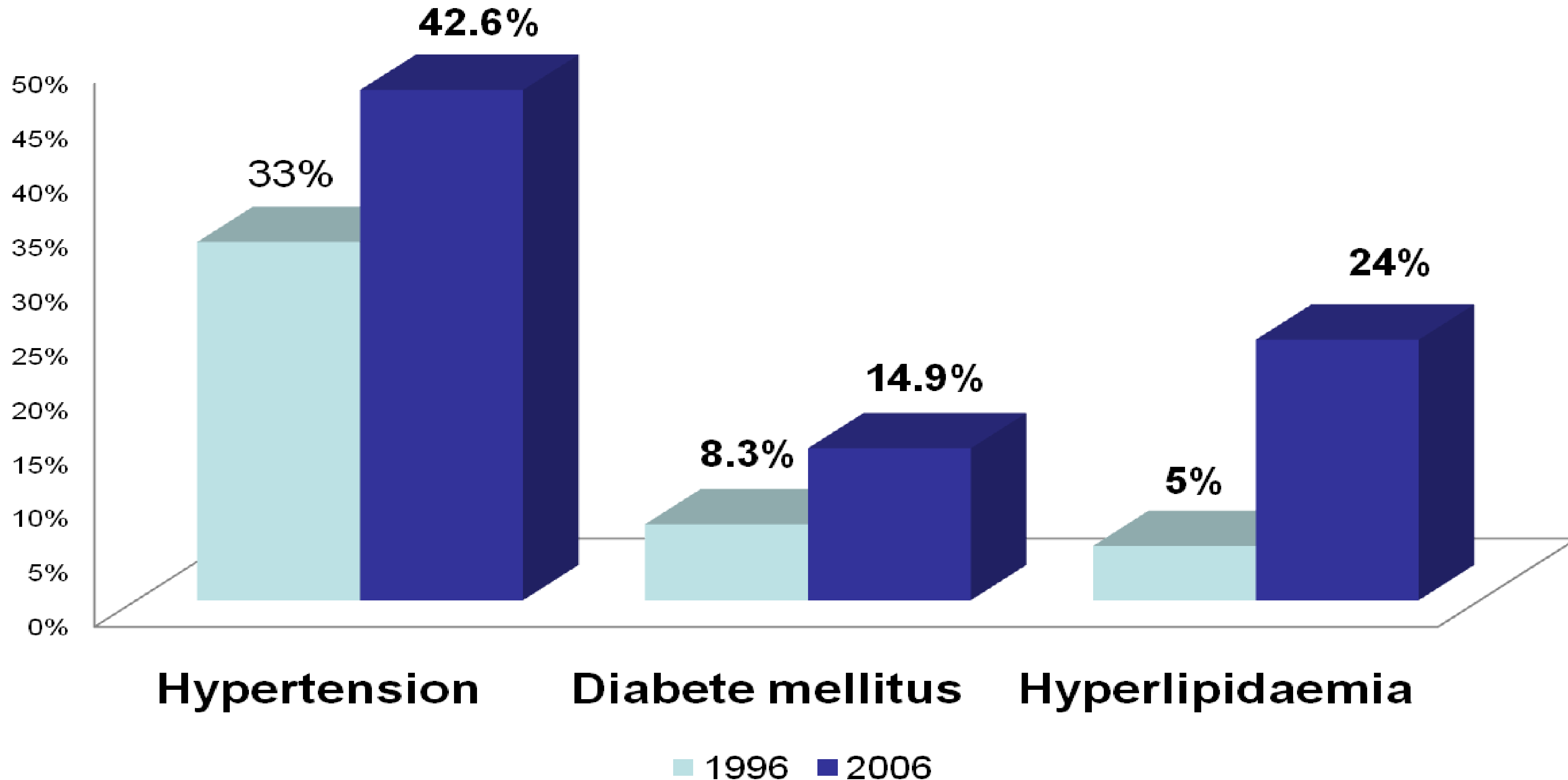
NCDs account for 51% of deaths in the country.

Are you one of the 70%?

>> REPORTS: P6

They are very common, poorly controlled in the community, costly to treat and of course deadly

Prevalence of Major Chronic Diseases 1996 and 2006



National Health Morbidity Surveys II & III

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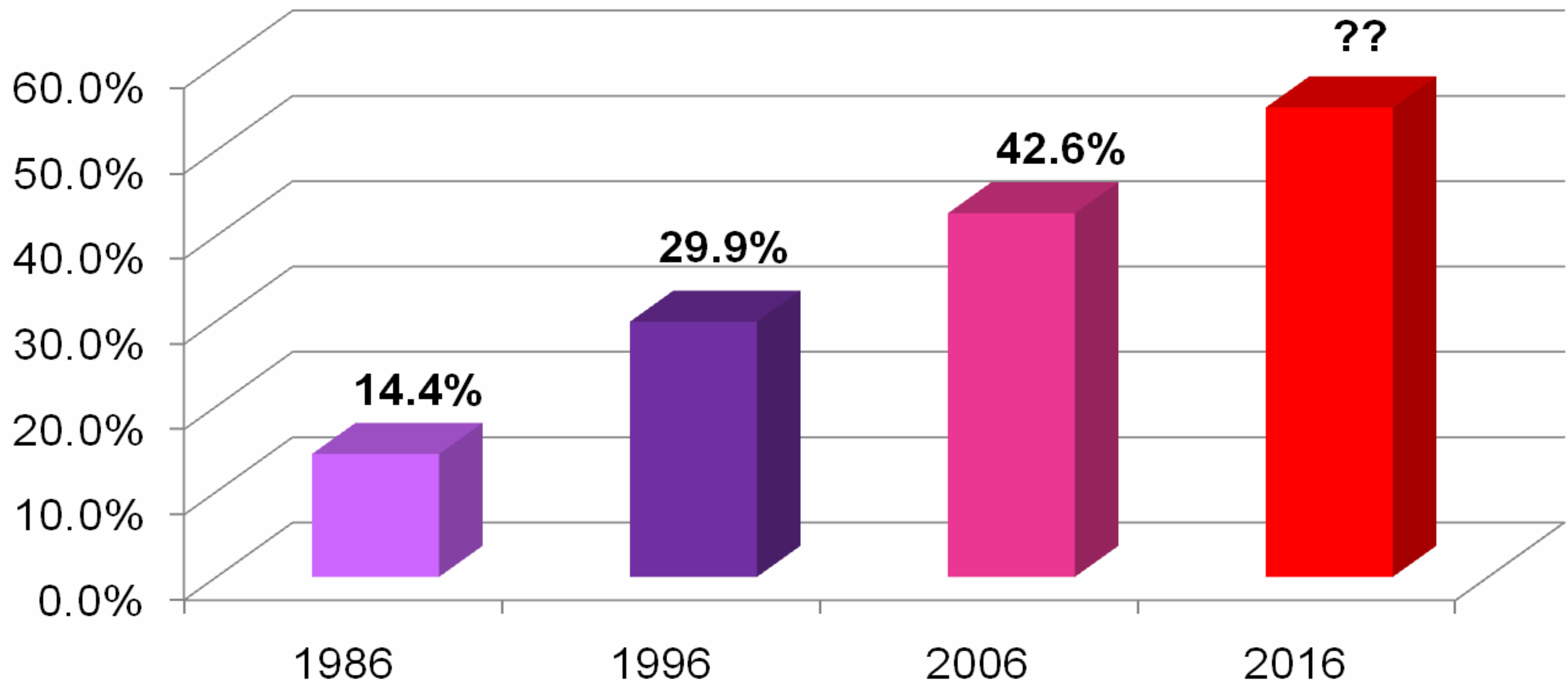
Rising Epidemic of Hypertension



National Health Morbidity Surveys I, II & III (1986-2006)

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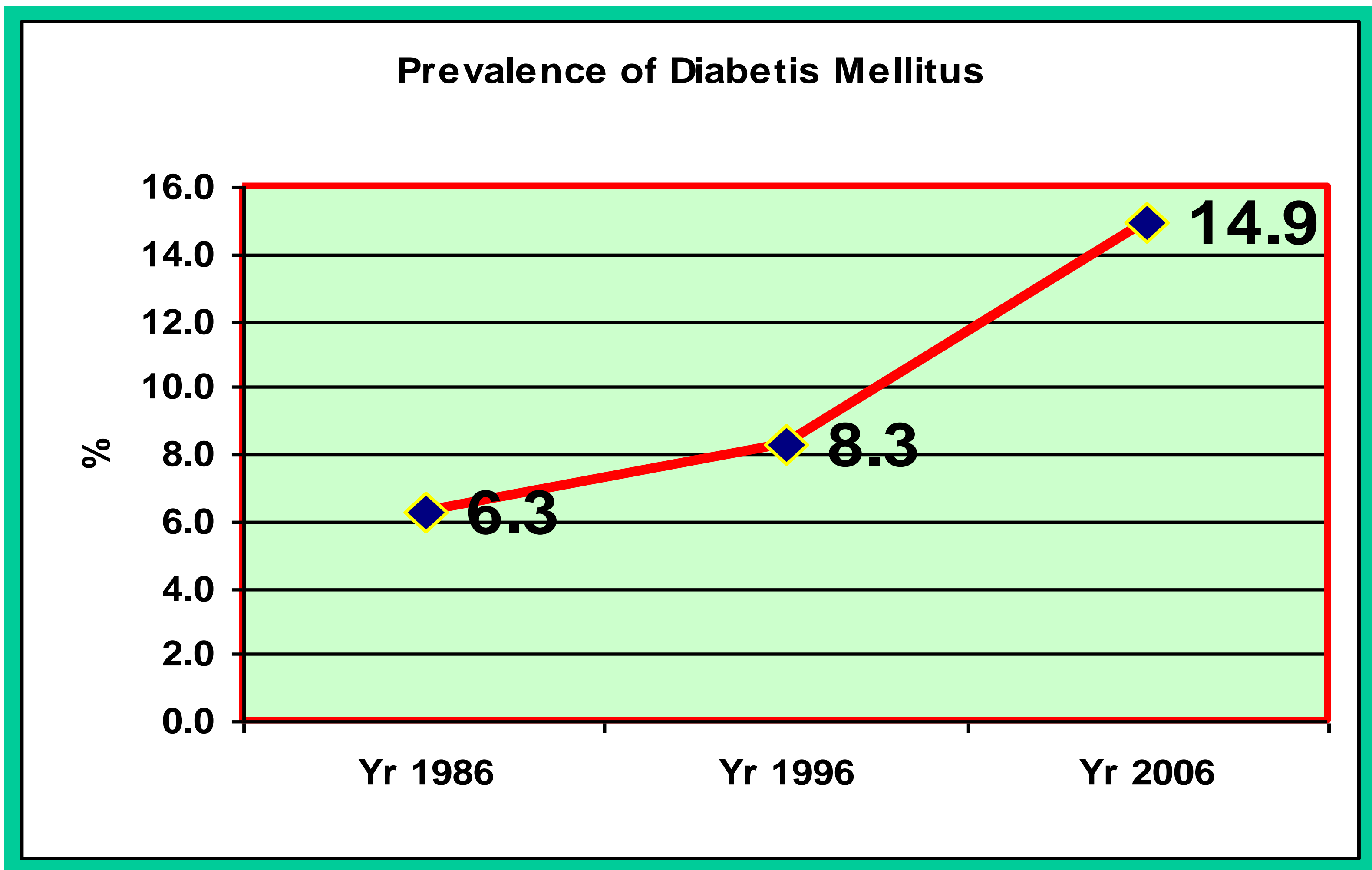
Rising Epidemic of DM



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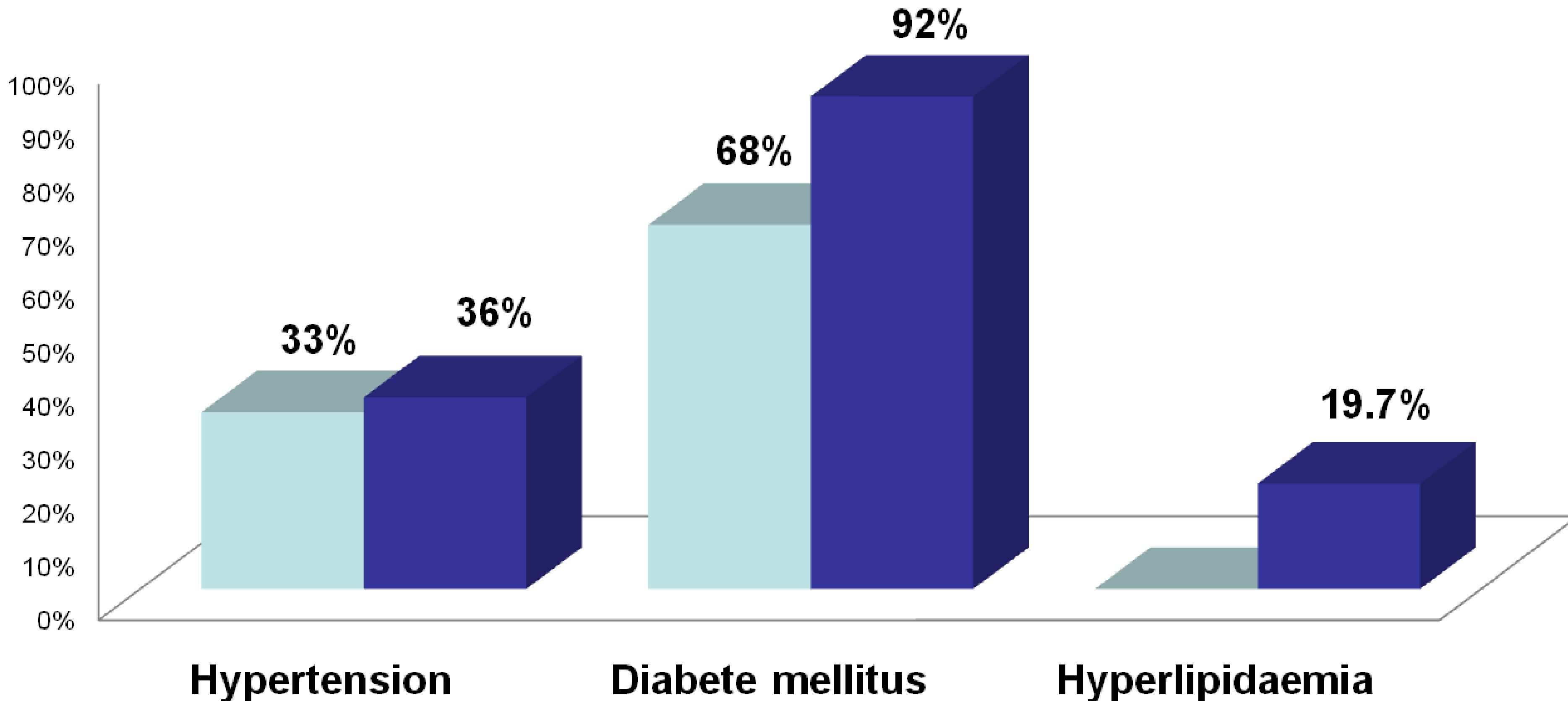
Patient Awareness of Major Chronic Diseases



Why so ??
Do doctors or other HCP talk to patients?
Do patients given chance to ask doctors or other HCP?

National Health Morbidity Surveys II & III

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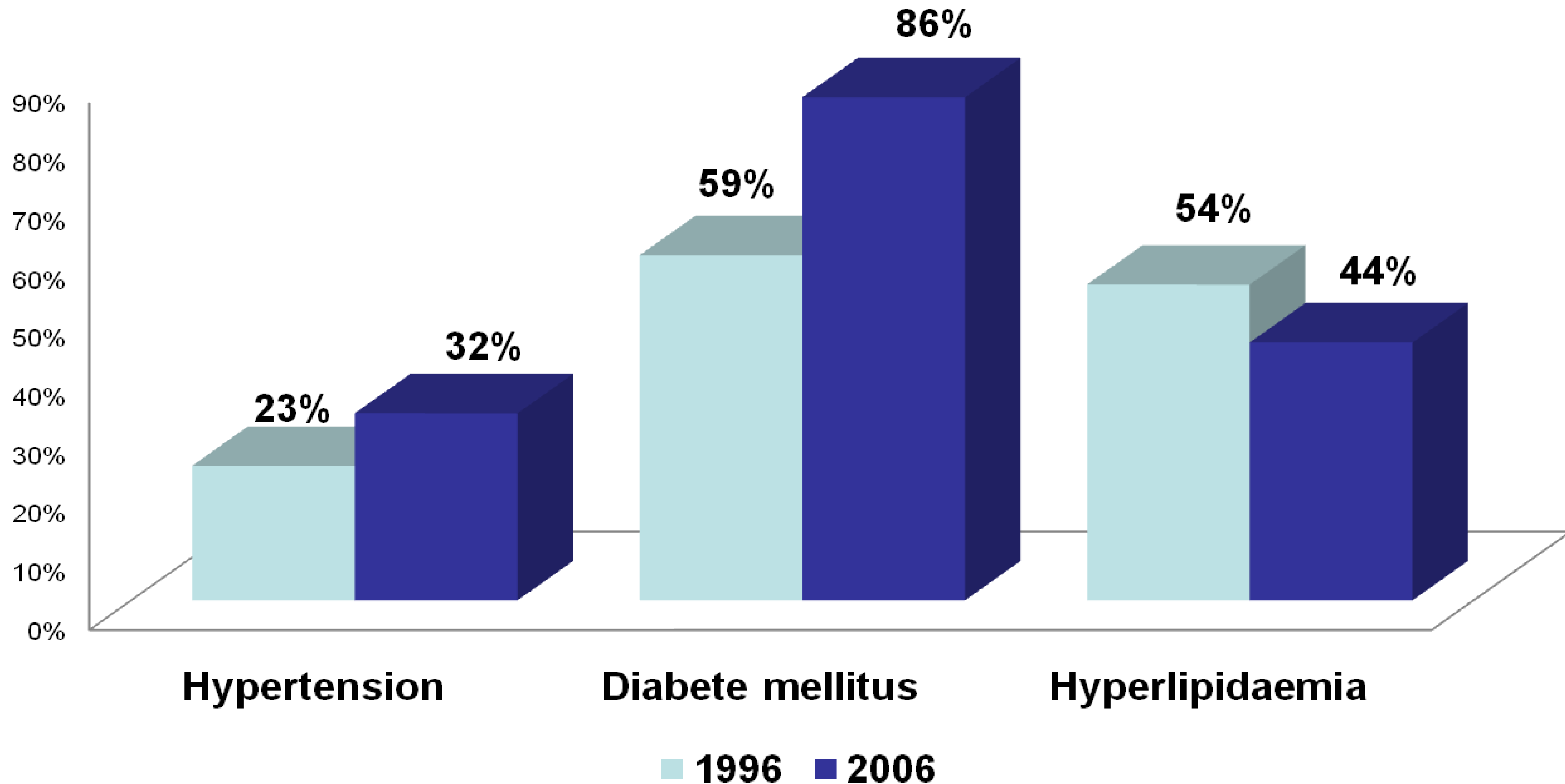
Proportion of patients who has treatment



National Health Morbidity Surveys II & III

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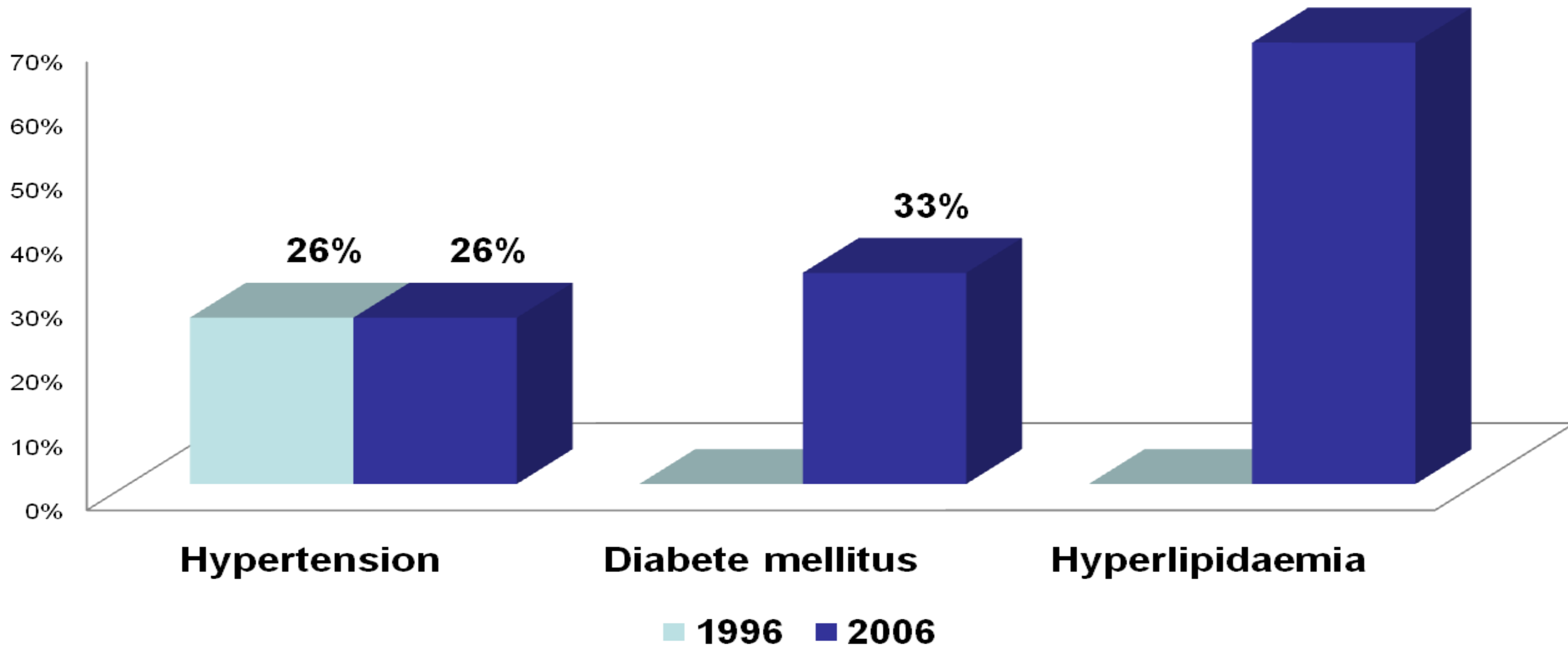
Proportion under control



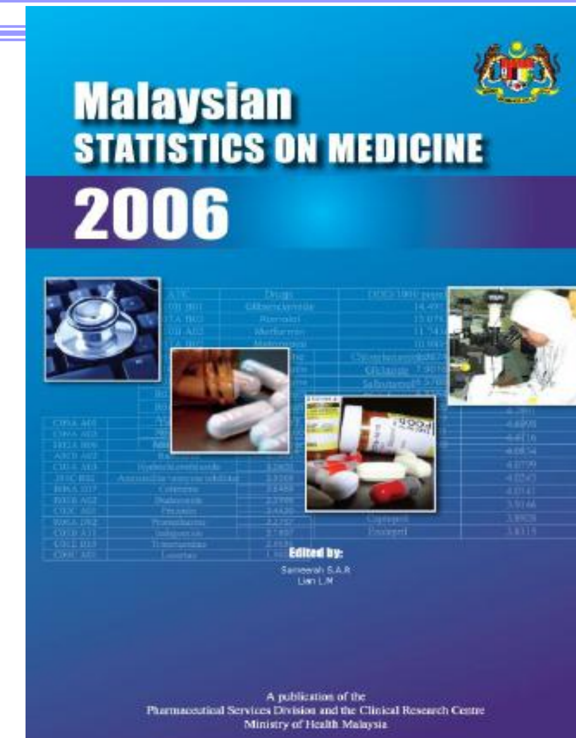
Target BP < 140/90 mmHg | Target HbA1C < 7% | Target TC < 5.2 mmol/l

Complications- end organ damage:
HPT and hyperlipidaemia- stroke, renal impairment, CVS diseases
DM- as above and blindness, amputation

National Medicine Used Survey

Table 1.1: Top 30 Therapeutic groups by Utilisation in DDD/1000 population/day 2006

NO.	ATC	THERAPEUTIC GROUP	PUBLIC	PRIVATE	TOTAL
1	A10	DRUGS USED IN DIABETES	32.7[illegible]2	7.5037	40.2957
2	C07	BETA BLOCKING AGENTS	21.3[illegible]22	4.4021	25.7343
3	C09	AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM	13.8[illegible]64	5.7554	19.5818
4	C08	CALCIUM CHANNEL BLOCKERS	15.9[illegible]1	3.4246	19.3656
5	C10	LIPID MODIFYING AGENTS	8.63[illegible]	8.5206	17.1599
6	R03	DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES	9.8198	6.6997	16.5194
7	C03	DIURETICS	11.775	2.8894	14.6643
8	R06	ANTIHISTAMINES FOR SYSTEMIC USE	5.1758	6.9945	12.1703
9	M01	ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS	3.9519	6.0516	10.0035
10	B01	ANTITHROMBOTIC AGENTS	5.8947	3.9402	9.835
11	J01	ANTIBACTERIALS FOR SYSTEMIC USE	3.8147	5.1222	8.9369
12	A02	DRUGS FOR ACID RELATED DISORDERS	2.5009	2.656	5.1568
13	C01	CARDIAC THERAPY	2.7994	1.8969	4.6961
14	H02	CORTICOSTEROIDS FOR SYSTEMIC USE	1.9061	2.5407	4.4467
15	N05	PSYCHOLEPTICS	3.0503	0.9951	4.0454

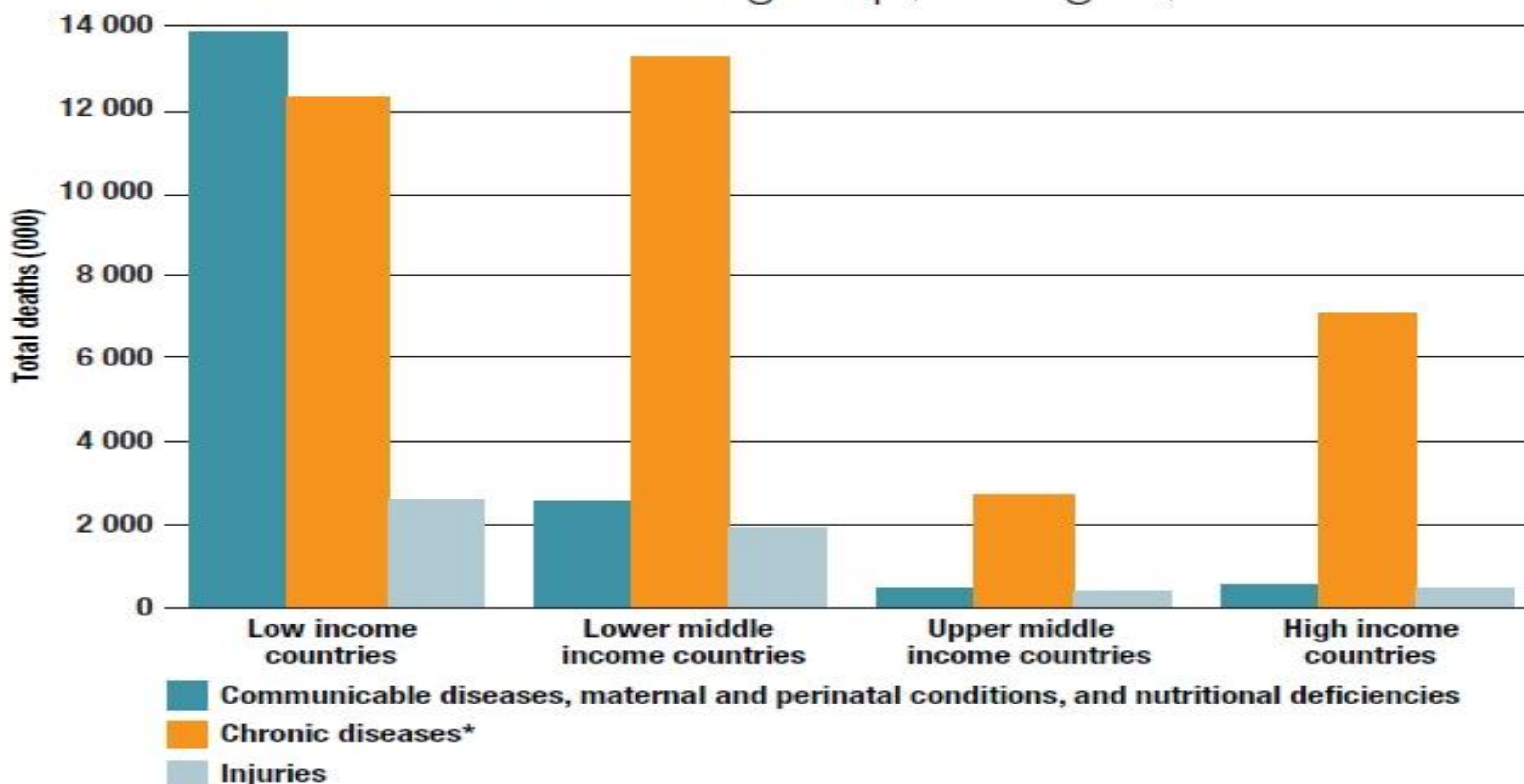


1. Cost
2. Why still not under control-
   Not just taking drug, but healthy life style

3.So what ?

Causes of Death- mainly due to chronic diseases

WHO Chronic Disease Report 2005



Death fr chronic dis >>>Dengue, TB, HIV/Aids

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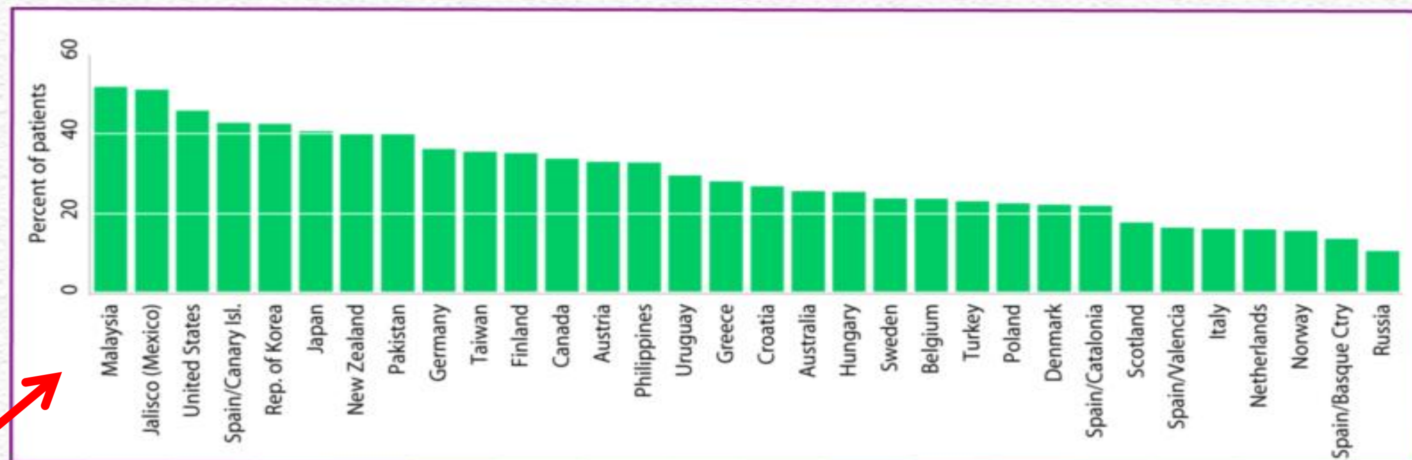
And the price we pay..Kidney disease

http://www.usrds.org/2005/slides/html/12_intl_05_files/fullscreen.htm - Microsoft Internet Explorer



Malaysia tops the world in diabetic nephropathy needing dialysis. In 2006, 15,000 patients on dialysis & 2000 kidney transplant (Prevalence 600 on RRT pmp; 120 new RRT pmp)

Done Internet

Source: National Renal Registry & USRDS

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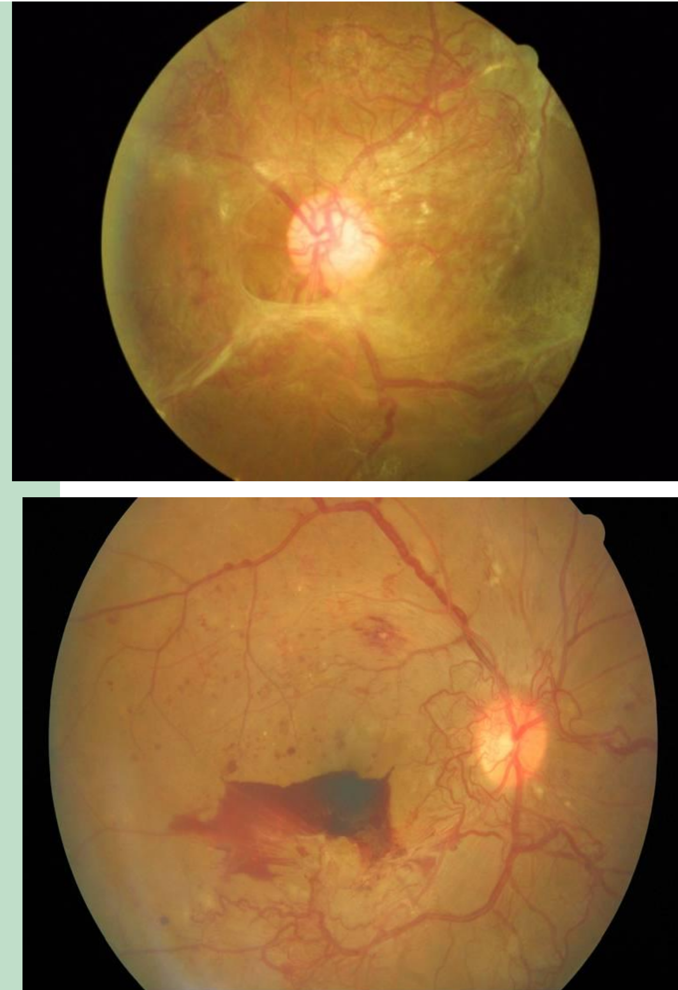
The price we pay… .. Eye disease

Among new diabetic patients seen at MOH eye clinic in 2008

- Any DR- 34.6%
- Sight threatening eye disease– 19.4%
- Need laser - 8.7%
- Severe DR- Irreversible blindness
- Need yearly follow-up



Source: Diabetic Eye Registry 2007 National Eye Database

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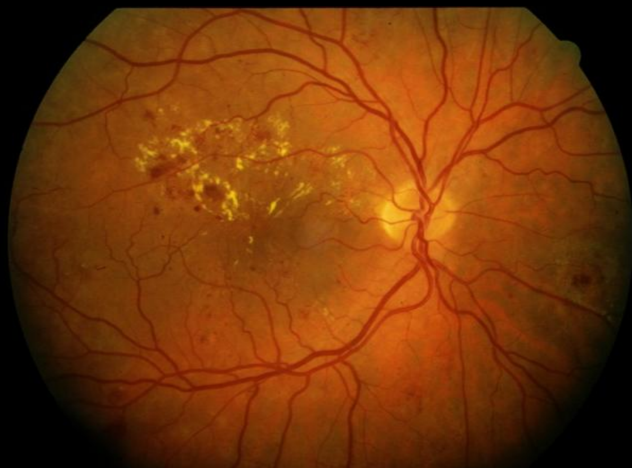
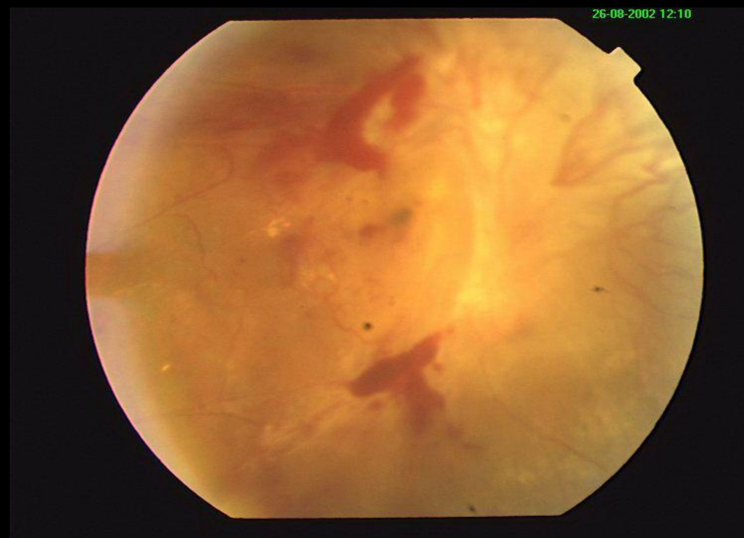
By the time it gets to this,



Diabetic Macular Edema



Advanced Diabetic Eye Disease

it's already too late

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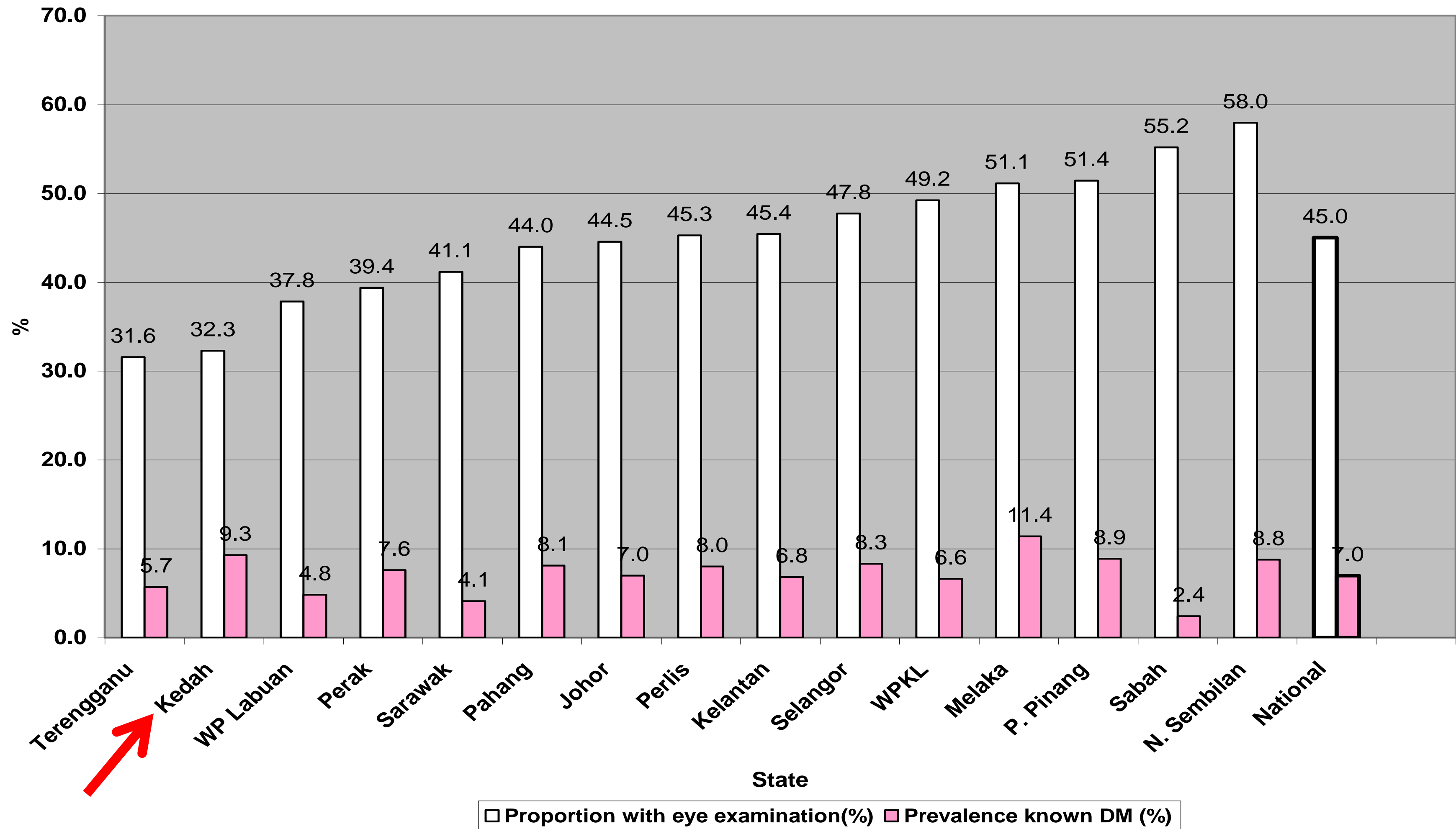
Prevalence of DM vs. Proportion had Eye Screening, by state



Source: National Health Survey NHMS 2006

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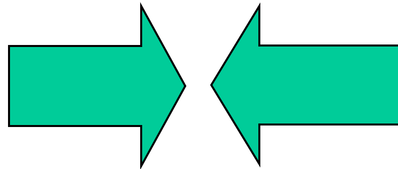
Can we bridge the gap?

Adv. biomedical knowledge,

Modern technology (drugs, devices etc)

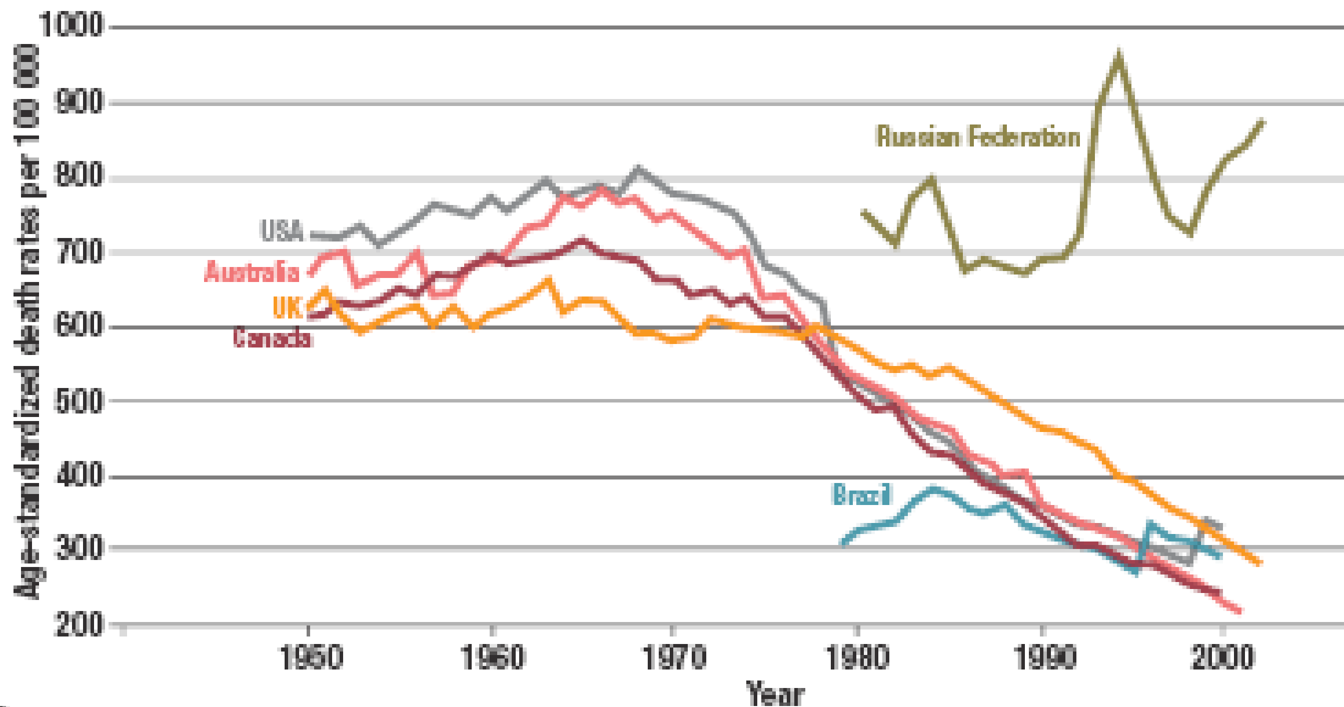
Trained professionals skilled in management of chronic diseases



Control of risk factors in the community &

Preventing end organ damage i.e. CVD, CKD, stroke, amputation & blindness

Some countries have shown this can be done



Causes for decrease?

- **47%** due to treatments, including secondary prevention
- **44%** due to changes in risk factors, including ↓lipids, ↓BP, stop smoking, physical activity

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Deficiencies in current healthcare system

1. Attend to acute episodic care and urgent concerns
2. Patients seek medical care only when sick
3. Rushed practitioners not following established practice guidelines
4. Lack of care coordination among healthcare providers
5. Lack of active follow-up to ensure the best outcomes
6. Patients inadequately trained to manage their illnesses

- Transform current healthcare system *from a system that is essentially reactive - responding mainly when a person is sick - to one that is proactive and focused on keeping a person as healthy as possible.*

- WHO Chronic Care Model focus at the community, organization, practice and patient levels.

http://www.improvingchroniccare.org/

THE CHRONIC CARE MODEL

WHO. Innovative care for chronic conditions: building blocks for action. Geneva: World Health Organisation, 2002

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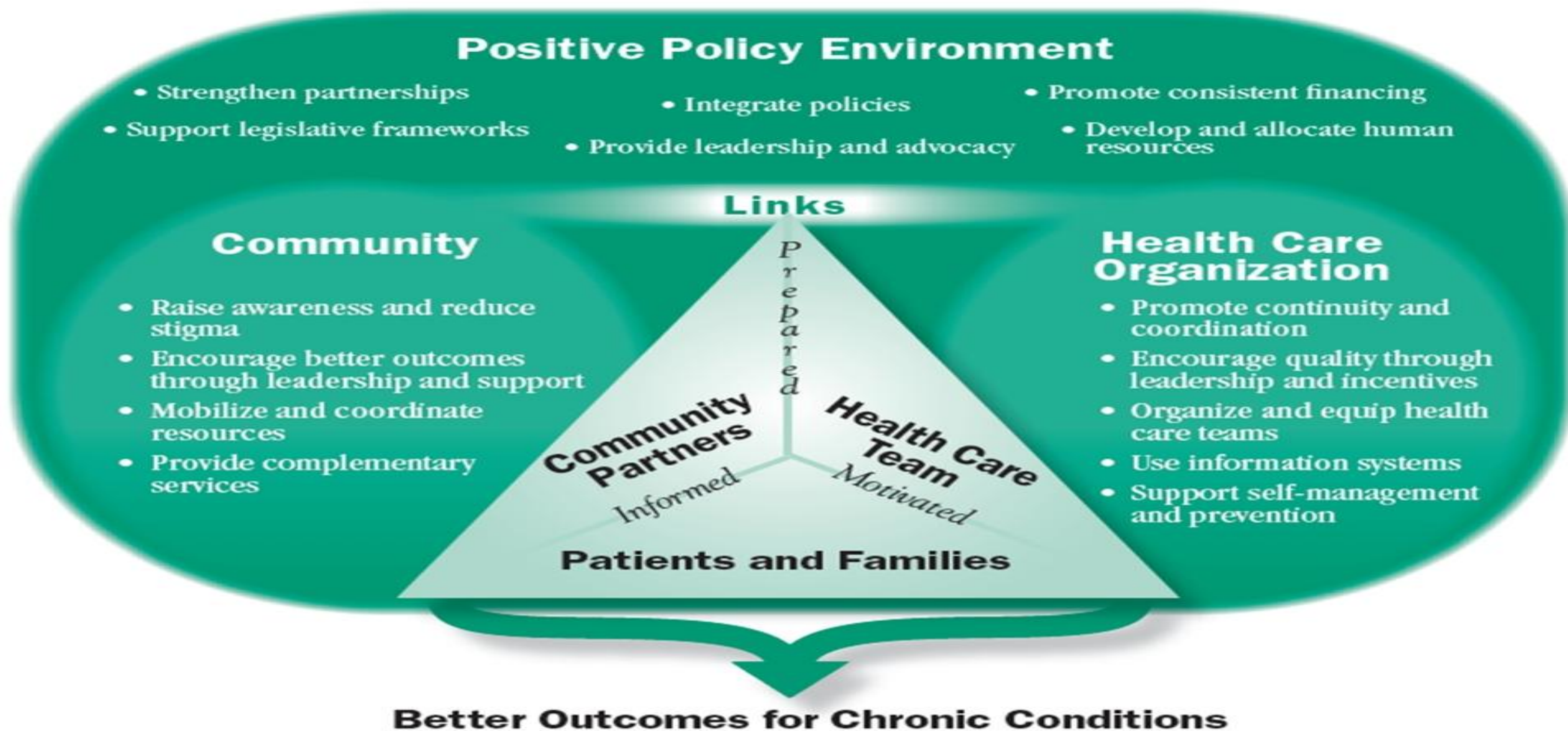
Improving primary care for patients with chronic illness: the chronic care model



Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model, part 2. JAMA. 2002;288(15):1909-14

The 6 elements of Chronic Care Model

#	Elements	Explanation
1	Health care organization	Goals, values & incentive to care providers must be aligned with payers & MOH
2	Community resources & policies	Patients & care providers need linkages with community resources like home care, patient education, exercise program, support groups..
3	Self management support	Enhance patient's self-management capacity; including acceptance of responsibility for self-care, the self-confidence and know-how (*knowledge, skills & tools*) required; build quality relationship & communication
4	Delivery system	Multi-disciplinary practice team with clear division of labour; planned management and visits
5	Decision support	Evidence based clinical practice; working to protocol, practice oversight and access to specialist expertise
6	Clinical information system	Computerized system to remind & prompt actions; to support shared care among multiple professionals, to feedback to providers, and to track progress

Components in Chronic Care Model (1)

1. Multidisciplinary health-care teams
2. Effective clinical information systems
3. Evidence-based decision support tools – Clinical Practice Guidelines
4. Patient self-management support
5. Quality assurance system – Clinical Audit

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Components in Chronic Care Model (2)

6. Quality incentives
7. Community resources
8. Universal funding mechanism
9. Well-trained human resources
10. Leadership and advocacy

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BRIDGING THE GAP

TRANSLATING

CHRONIC CARE MODEL

INTO

a demonstration project of multidisciplinary chronic disease management in primary care setting

CORFIS 1.0 INTERVENTION

1. Protocol driven care and simplified drug regimen
2. Patient centred healthcare delivery
3. Patient self management capacity
4. Integrated multi-disciplinary team (nurse educator, pharmacist, dietician)

- *Medical nutrition therapy (MNT)*
- *Pharmaceutical care*
- *Patient education & counselling services on therapeutic lifestyle changes*
- *Telephony nurse advisory service (follow-up & empowerment)*
- *Specialist Medical advisory service (remote review of screening reports & patient's disease control)*

5. Efficient coordination, communication & information sharing among health professionals & patient through IT application
6. Social support & connection with community resources
7. Incentives – Loan of self-monitoring devices

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Evidence from CORFIS

	Treatment goal	CORFIS	Control	P value
Diabetes	$HbA_{1C} \leq 7\%$	**43%**	**23%**	0.01
Hypertension	BP<140/90mmHg; Or <130/80mmHg if Diabetes or CKD	**57%**	**34%**	0.001
Hyperlipid-emia	<4.1 mmol/l; or <3.4 mmol/l if 2 or more CVD factors; or < 2.6 if DM or CAD	**50%**	**32%**	0.027

- ✓ Healthcare for people with chronic diseases in Malaysia is not well organized.
- ✓ When we make an effort to organize healthcare to meet their needs, the outcomes are uniformly positive

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What is my role?
As a doctor

- Chronic care is NOT a single person job.
- Chronic care demands a change in the way we work
  - Multi disciplinary
  - Patient centered
- DOCTORS can become the change agent
  - Seek and share evidence for change (new treatment)
  - Provide leadership role
  - Encourage teamwork – have team goals, mission, slogan "we care team" at clinic level.
  - Train and empower staff
  - Facilitate such that change can happen
  - Evaluate outcome and promote continuous learning for improvement – collect data to show effect/impact of your team's effort.

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What is my role?
As a nurse/MA

- A nurse or MA has many advantages
  - Can relate better with patients
  - More time with patient
- Role as nurse/case manager and become good advocators for patients
- Can help team with
  - Defaulter tracing
  - Follow ups / reminders
  - Educator and counselor – with patients and careers
  - Facilitate self support group

What is my role?
As a reception clerk/attendant

- Can be active member of Chronic care team
  - Be genuinely interested in their problem (most times social problem will impact control e.g. transport problem to come for appointment) so as can find ways to help
  - Defaulter tracing / appointment giving
  - Promote and ask about self care
  - Promote support groups in the community

What is my role?
As a pharmacist/dieticians/physiotherapists

- Be part of the Chronic care team
- Impart knowledge and skill related to your content area (drugs related, diet related, exercise related) to promote better compliance and holistic approach to care
- Provide counseling and education session
- Act as advocator for patients during CC team meet

Chronic Disease a Global Challenge : is it here to stay? Yes

But
YOU can make a difference for YOUR patients!!!!

Whoever renders services to many puts himself in line for greatness
– great wealth, great return, great satisfaction, great reputation, and great joy!!!

Jim Rohn

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Thank You

www.crc.gov.my