

21st century Human Development Skills for Health Professions Education

Mora Claramita

HUMAN DEVELOPMENT INDEX

What is HDI?



Life
Expectancy
at Birth

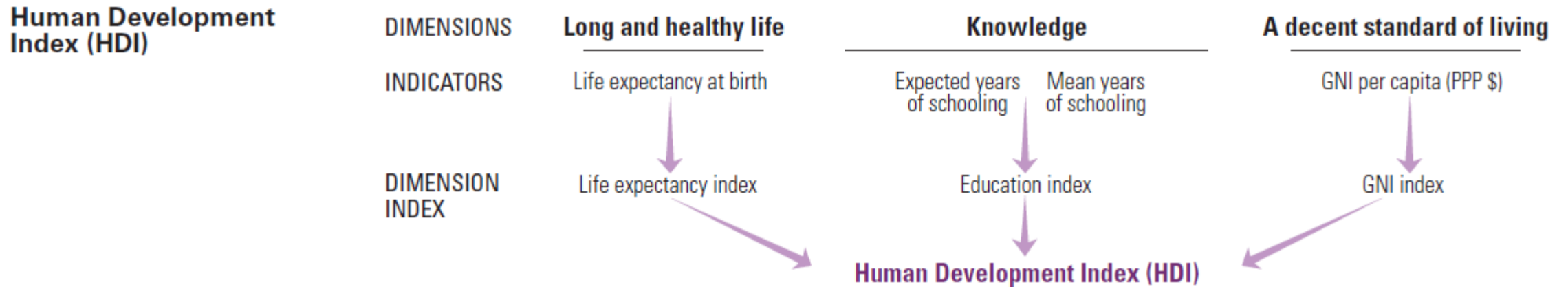


Average
Education
Levels
+
Adult Literacy
Rates



Standard of
Living
(GNI/capita
PPP)

Human development index



- The Human Development Index (HDI) is a statistic composite index of:
 - life expectancy,
 - education, and
 - per capita income indicators

Human Development Index

<http://hdr.undp.org/en/content/human-development-index-hdi>

- **Indeks Pembangunan Manusia (IPM) / Human Development Index (HDI)** adalah pengukuran perbandingan dari harapan hidup, melek huruf, pendidikan dan standar hidup untuk semua negara seluruh dunia. IPM digunakan untuk mengklasifikasikan apakah sebuah negara adalah negara maju, negara berkembang atau negara terbelakang dan juga untuk mengukur pengaruh dari kebijaksanaan ekonomi terhadap kualitas hidup.

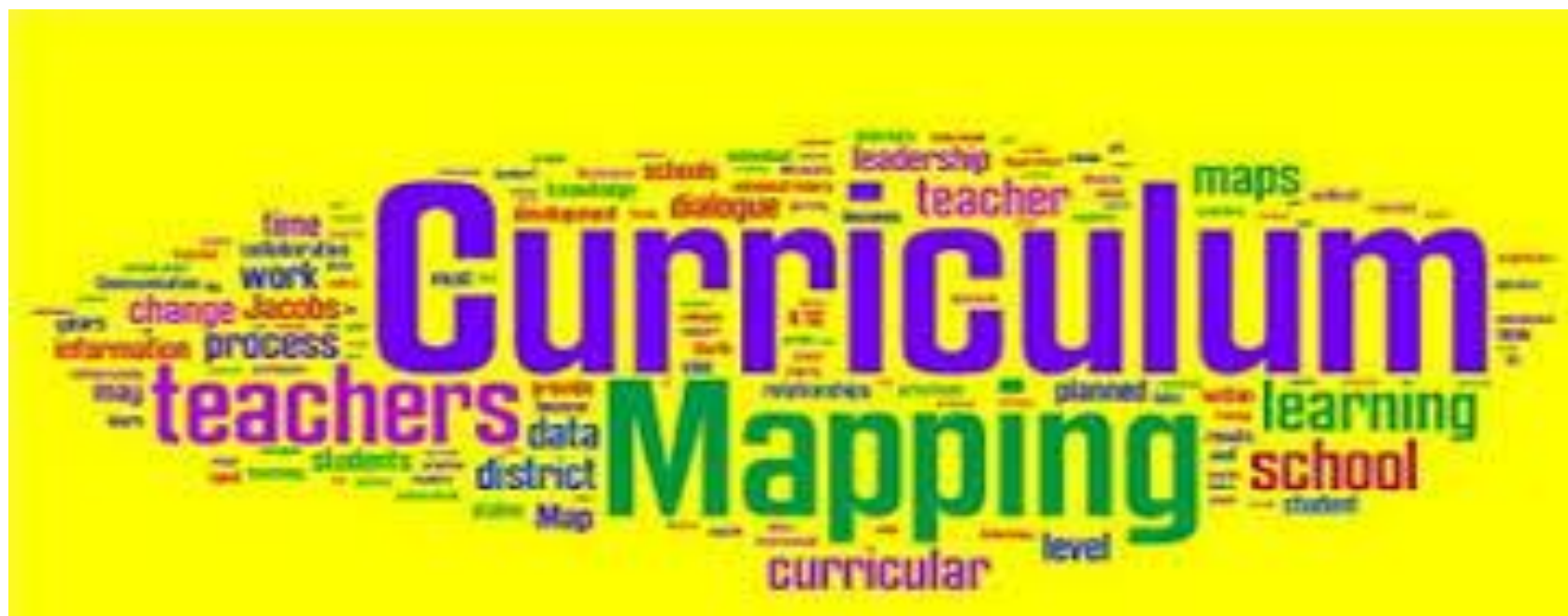
1. KESEHATAN: Angka Harapan Hidup, Angka Maternal dan Infant Mortality Rate
2. PENDAPATAN PER KAPITA
3. TINGKAT PENDIDIKAN: 3.1 Angka Literacy dan 3.2 Tingkat Pendidikan



Indonesia – Medium HDI

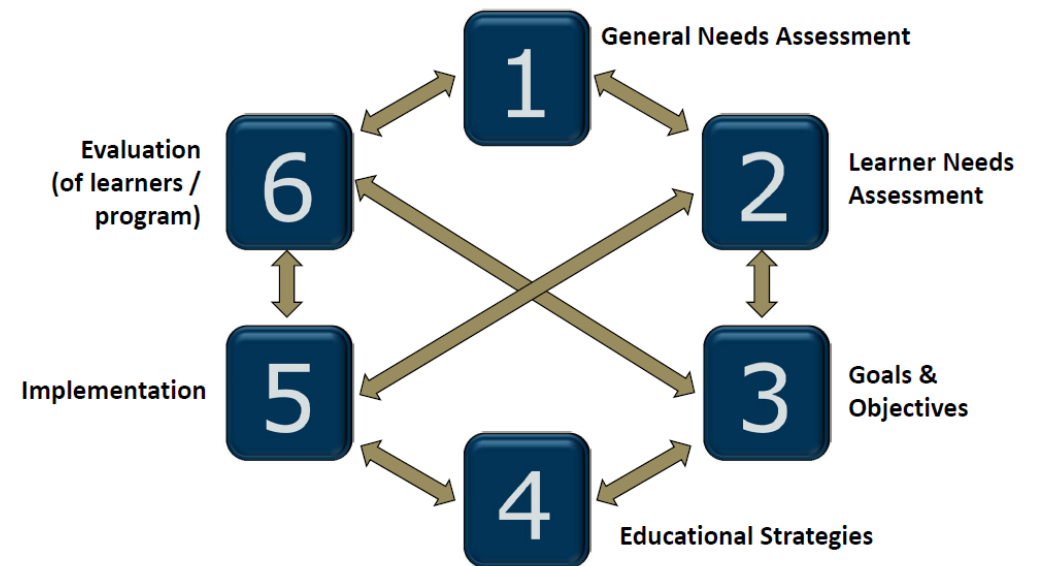
- <http://hdr.undp.org/en/composite/HDI>

		HDI	Mean age	School years max	Mean school years	GNI/capita	GNI rank – HDI rank	HDI rank
16	INA	0.694	69.4	12.8	8.0	10,846	-19	115



KERN, *et al.* 1998, Six Steps Curriculum Development in Medical Education

- Step 1 Problem Identification and General Needs Assessment
- Step 2 Needs Assessment for Targeted Learners
- Step 3 Goals and Objectives
- Step 4 Educational Strategies
- Step 5 Implementation
- Step 6 Evaluation and Feedback



Step 1a problem Identification :

- The first step is to identified the **health problem** or learning problem that needs to be addressed in your practice. This could be a disease state that has emerged in your population, a national epidemic, or a well known health problem that you feel is not being satisfactorily addressed in your current curriculum.

KERN, *et al.* 1998, Six Steps Curriculum Development in Medical Education

Complete Problem Identification

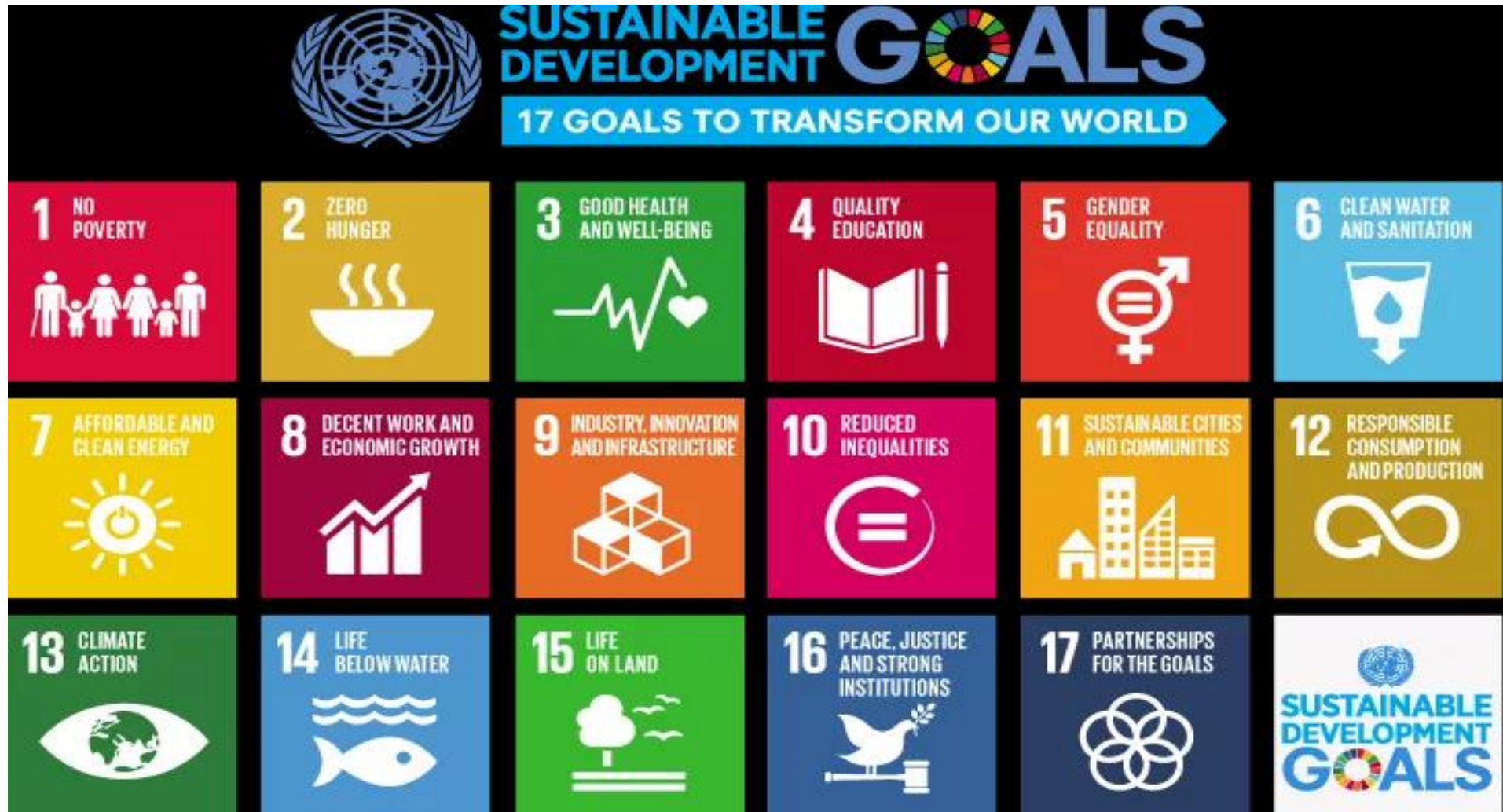
- Who does the problem effect:
 - Patient
 - Learners
 - Medical Educators

KERN, *et al.* 1998, Six Steps Curriculum Development in Medical Education

What does it effect?

- What does it effect
 - **Clinical outcomes**
 - Educational effectiveness
 - Educational outcomes
 - QOL
 - Other health care resources

KERN, *et al.* 1998, Six Steps Curriculum Development in Medical Education



<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

- **PEOPLE.** We are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.
- **PLANET.** We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.
- **PROSPERITY.** We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.
- **PEACE.** We are determined to foster peaceful, just and inclusive societies which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.
- **PARTNERSHIP.** We are determined to mobilize the means required to implement this Agenda through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.

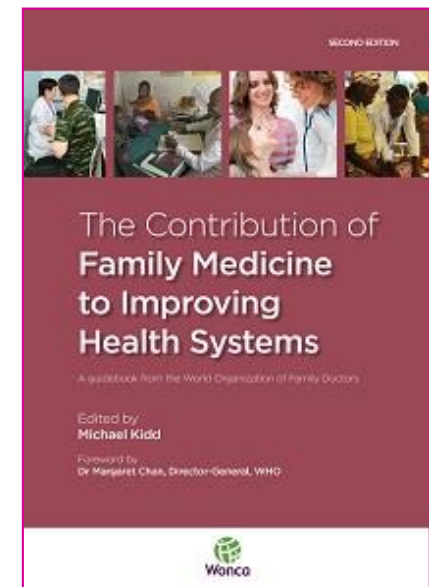
The interlinkages and integrated nature of the Sustainable Development Goals are of crucial importance in ensuring that the purpose of the new Agenda is realized. If we realize our ambitions across the full extent of the Agenda, the lives of all will be profoundly improved and our world will be transformed for the better



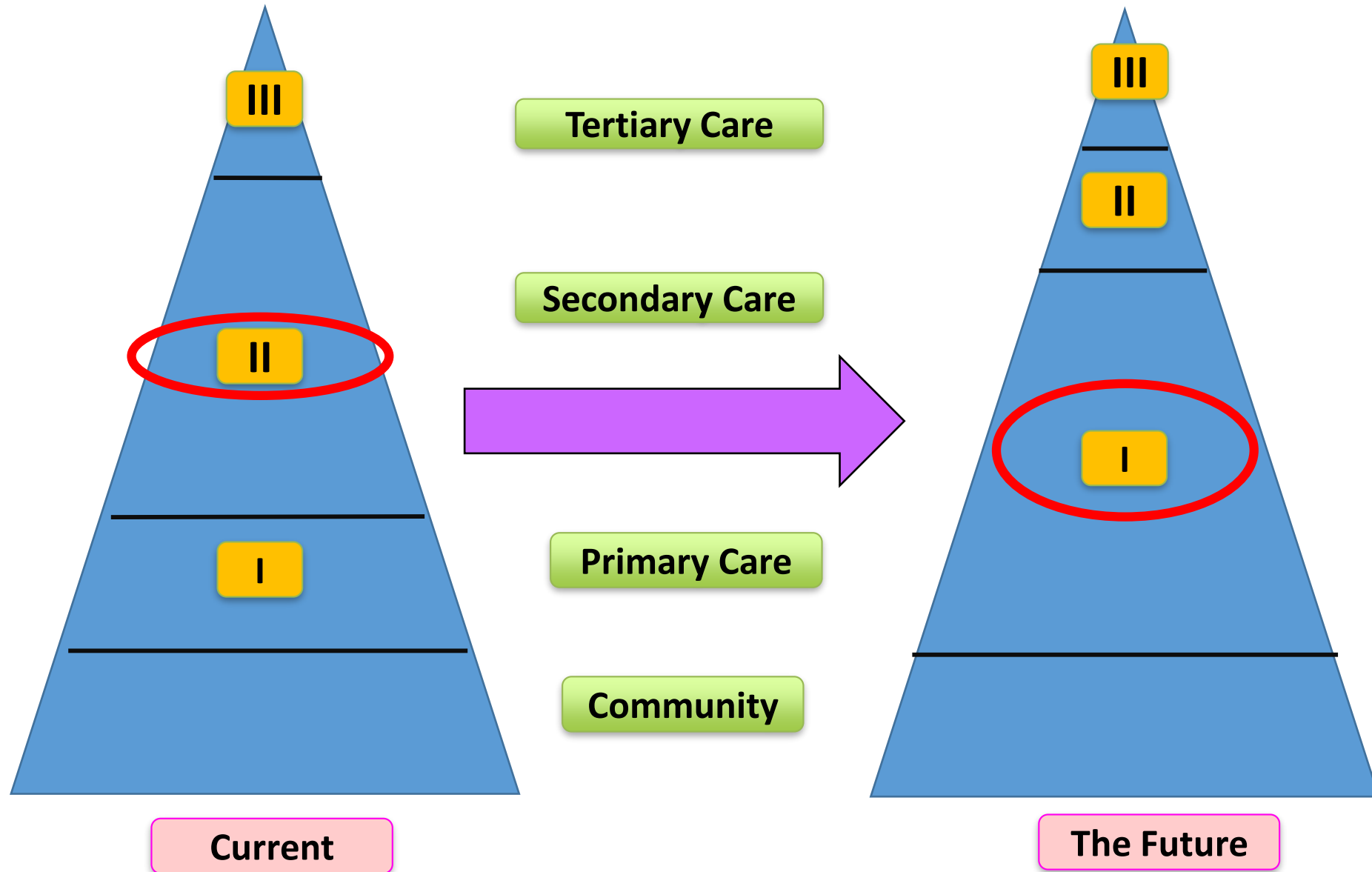
REKOMENDASI WHO

- WHO - DEKLARASI ALMA ATA 1978 – HEALTH FOR ALL
- WHO – PRIMARY HEALTH CARE IS NOW MORE THAN EVER, 2008:
 1. Reformasi kesetaraan layanan kesehatan melalui Universal Coverage (sistem pembiayaan kesehatan semesta)
 2. Reformasi Pelayanan Kesehatan berpusat pada individu (fokus pada keluarga dan berorientasi pada komunitas)
 3. Reformasi Regulasi untuk mengatur publik terkait sistem pembiayaan
 4. Reformasi Kepemimpinan di bidang layanan primer

Figure 1.13 The social values that drive PHC and the corresponding sets of reforms



Primary Health Care in Indonesia UU BPJS 2011 dan UU DIKDOK 2013

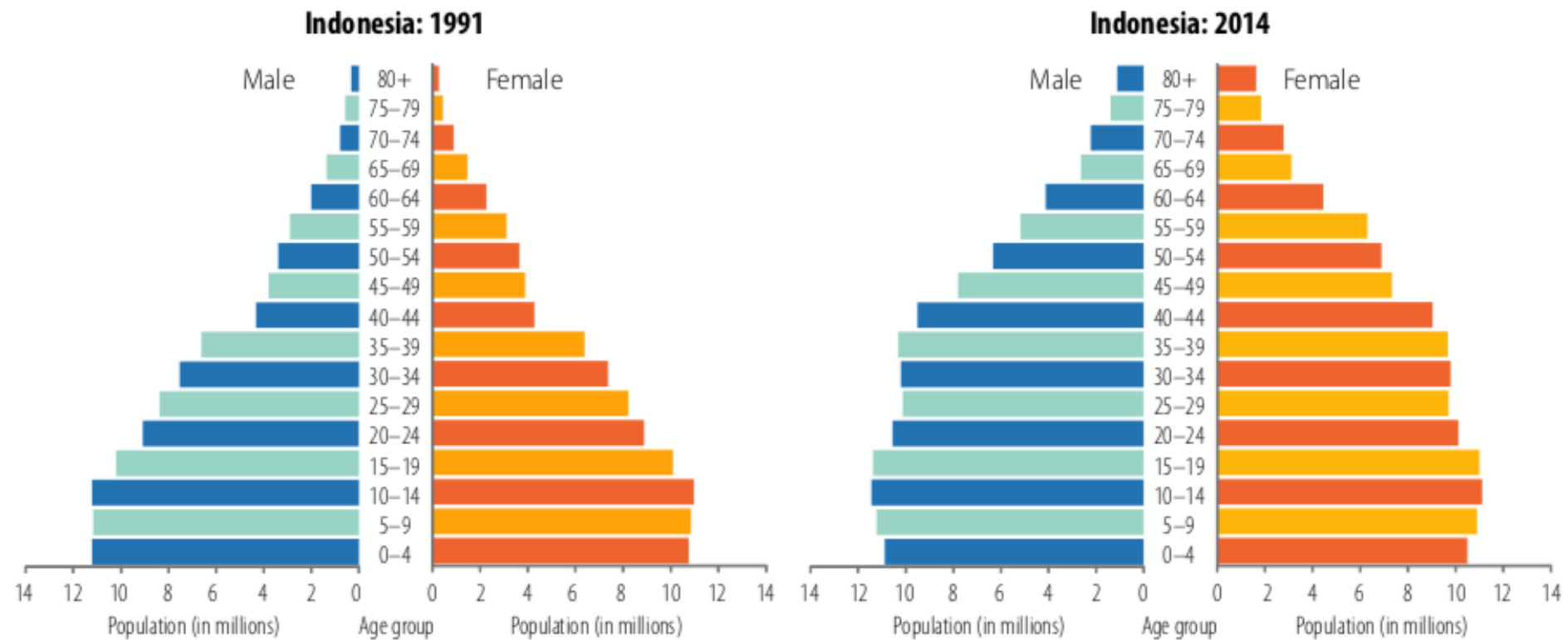


MASALAH KESEHATAN INDONESIA



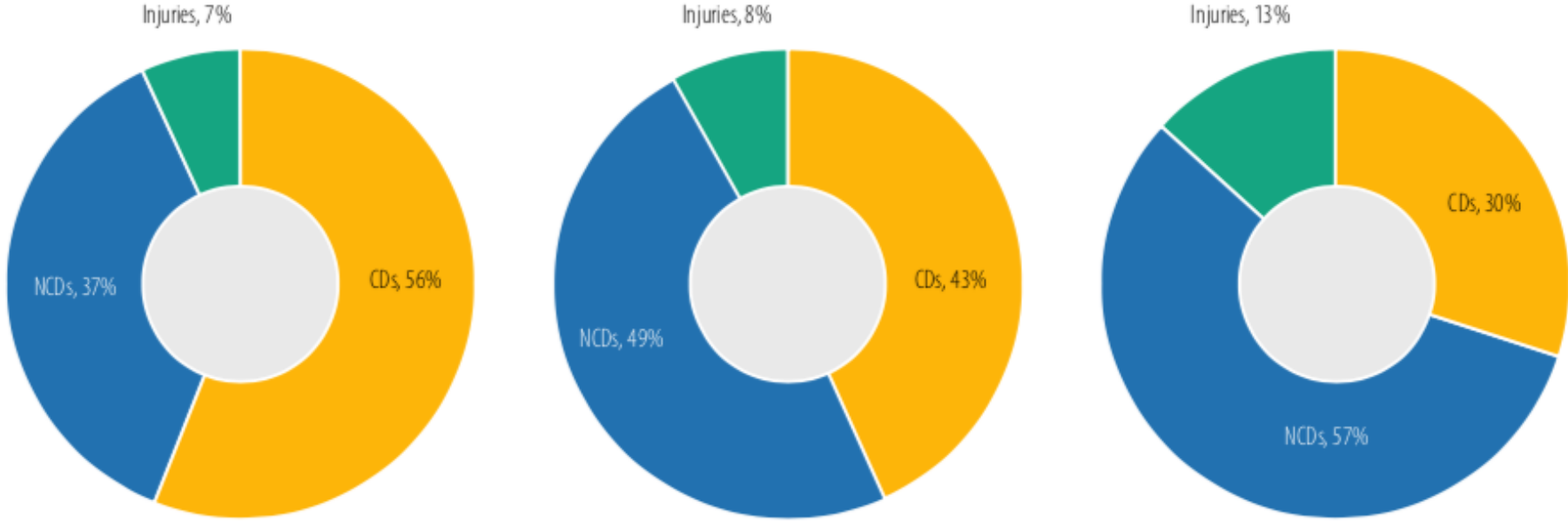
Literature

- PRIMARY HEALTH CARE SYSTEMS (PRIMASYS)
- Comprehensive case study from Indonesia
- <https://www.who.int/alliance-hpsr/projects/AHPSR-PRIMASYS-Indonesia-comprehensive.pdf?ua=1>
- Mboi, dkk. The Lancet Augustus 2018. ARTICLES | [VOLUME 392, ISSUE 10147](#), P581-591, AUGUST 18, 2018
- On the road to universal health care in Indonesia, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016
- [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)30595-6/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)30595-6/fulltext)



Source: United States Census Bureau database.

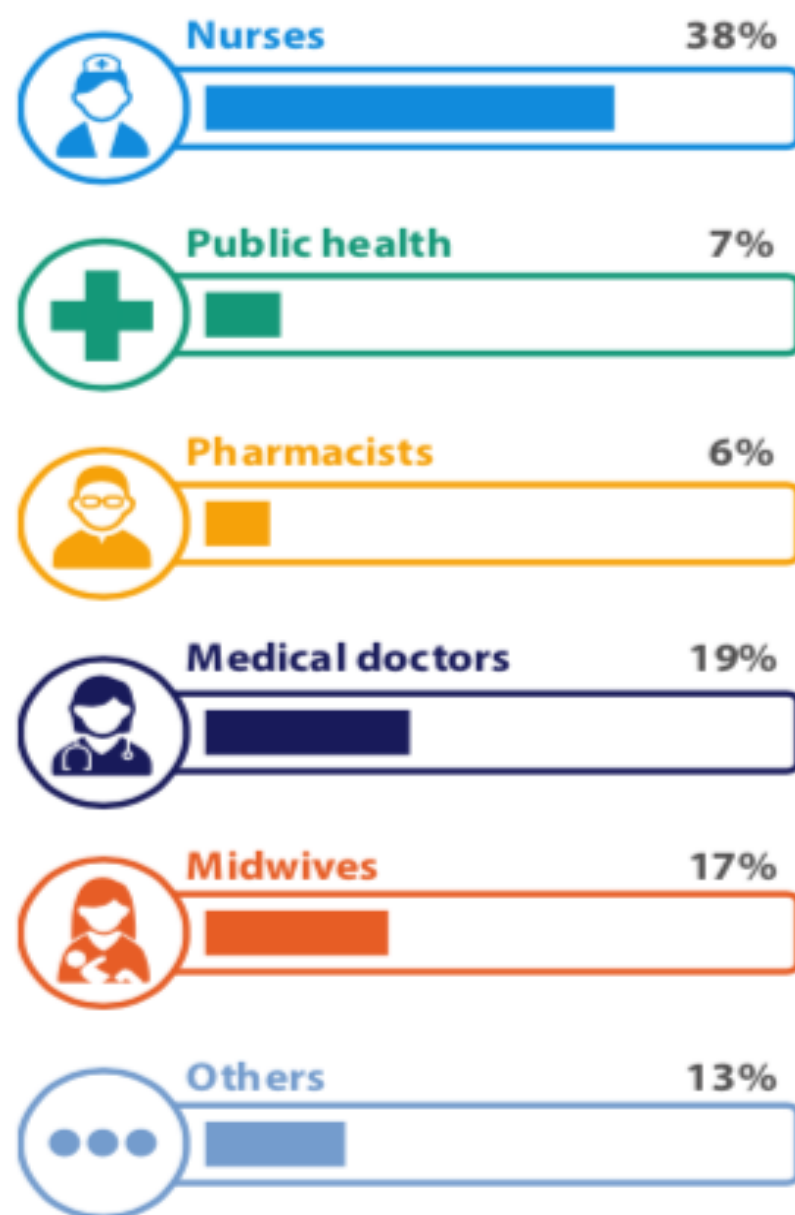
Figure 3. Indonesia: epidemiological transition



CDs: Communicable Diseases
NCDs: Non-Communicable Diseases

Source: Government of Indonesia, Ministry of Health.

Figure 7. Health personnel (%), 2016



Source: Department of Human Resources Development, Ministry of Health (39)

On the road to universal health care in Indonesia, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016

Nafsiah Mboi, Indra Murty Surbakti, Indang Trihandini, Iqbal Elyazar, Karen Houston Smith, Pungkas Bahjuri Ali, Soewarta Kosen, Kristin Flemons, Sarah E Ray, Jackie Cao, Scott D Glenn, Molly K Miller-Petrie, Meghan D Mooney, Jeffrey L Ried, Dina Nur Anggraini Ningrum, Fachmi Idris, Kemal N Siregar, Pandu Harimurti, Robert S Bernstein, Tikki Pangestu, Yuwono Sidharta, Mohsen Naghavi, Christopher J L Murray, Simon I Hay

Summary

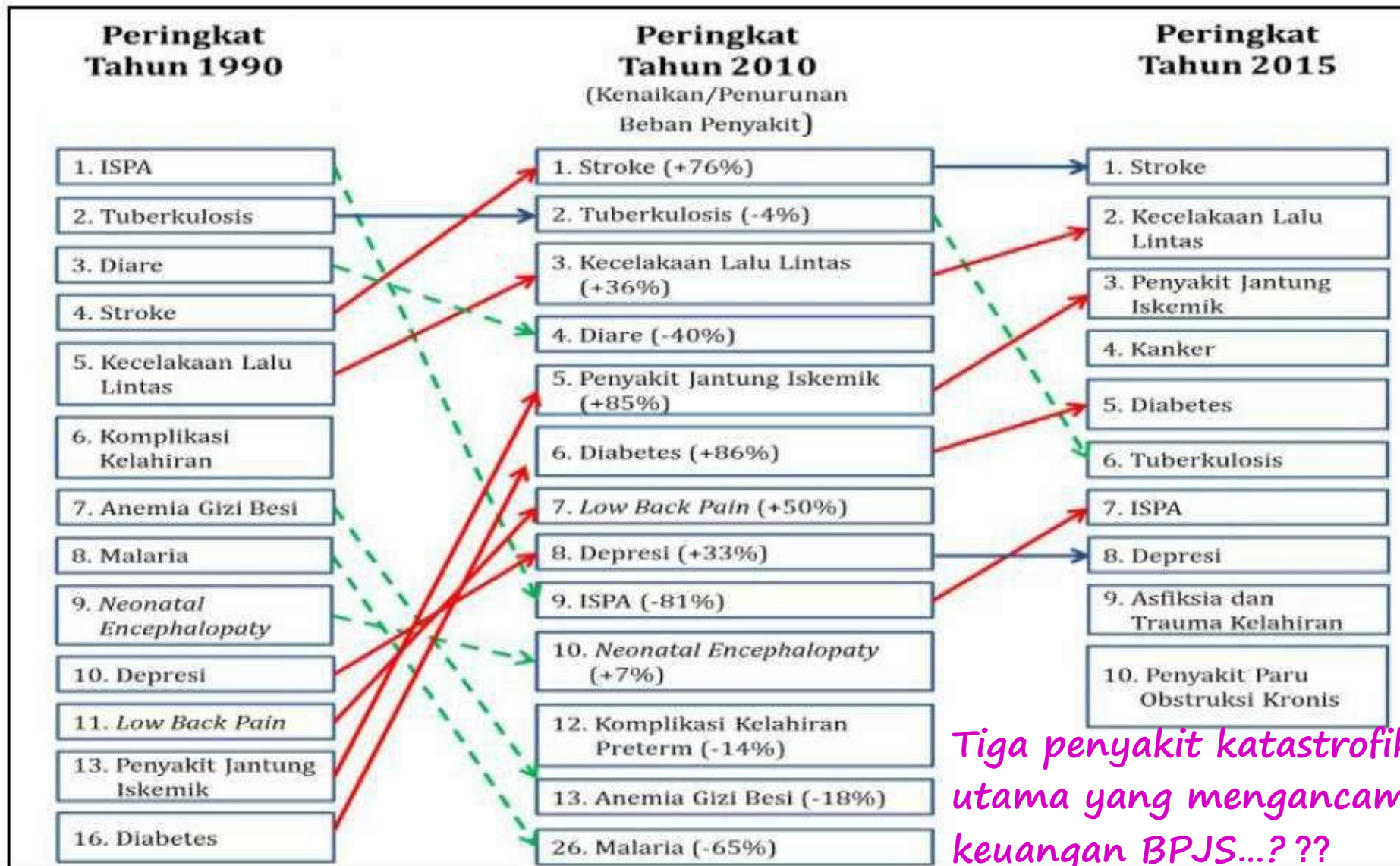
Background As Indonesia moves to provide health coverage for all citizens, understanding patterns of morbidity and mortality is important to allocate resources and address inequality. The Global Burden of Disease 2016 study (GBD 2016) estimates sources of early death and disability, which can inform policies to improve health care.

Methods We used GBD 2016 results for cause-specific deaths, years of life lost, years lived with disability, disability-adjusted life-years (DALYs), life expectancy at birth, healthy life expectancy, and risk factors for 333 causes in Indonesia and in seven comparator countries. Estimates were produced by location, year, age, and sex using methods outlined in GBD 2016. Using the Socio-demographic Index, we generated expected values for each metric and compared these against observed results.

Findings In Indonesia between 1990 and 2016, life expectancy increased by 8·0 years (95% uncertainty interval [UI] 7·3–8·8) to 71·7 years (71·0–72·3): the increase was 7·4 years (6·4–8·6) for males and 8·7 years (7·8–9·5) for females. Total DALYs due to communicable, maternal, neonatal, and nutritional causes decreased by 58·6% (95% UI 55·6–61·6), from 43·8 million (95% UI 41·4–46·5) to 18·1 million (16·8–19·6), whereas total DALYs from non-communicable diseases rose. DALYs due to injuries decreased, both in crude rates and in age-standardised rates. The three leading causes of DALYs in 2016 were ischaemic heart disease, cerebrovascular disease, and diabetes. Dietary risks were a leading contributor to the DALY burden, accounting for 13·6% (11·8–15·4) of DALYs in 2016.

Interpretation Over the past 27 years, health across many indicators has improved in Indonesia. Improvements are partly offset by rising deaths and a growing burden of non-communicable diseases. To maintain and increase health gains, further work is needed to identify successful interventions and improve health equity.

Indonesia's Burden of Disease



The aim of education?



Ki Hadjar Dewantara

- Tujuan Pendidikan:

Universities and social transformation

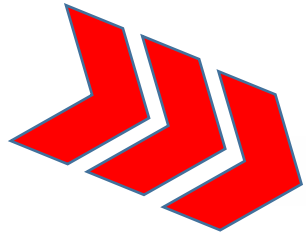
John Brennan, Roger King and Yann Lebeau © Association of Commonwealth Universities, 2004

What is being transformed in society?

1. The economy: the formation of human capital;
2. The policy: the creation and sustenance of civil institutions; the selection and socialization of political and social elites;
3. Social structure: the creation of pluralistic societies, including the relationships between, and opportunities for, diverse social and ethnic groups;
4. Culture: The production and dissemination of ideas, exerting influence upon
 - 4.a. Attitude/ Professionalism
 - 4.b. Evidences/Research based
 - 4.c. Education/ Knowledge and Skills



Social transformation



Inspiring leader

2030

Political, global development

Agent of Cultural change

Economic and social development

Future Generations

Professional Agent

2017

Culture and Character Building

Expert

Research based (EBM)

Generation II

Education (knowledge and skills)

Generation I



REKOMENDASI

The Lancet Commissions



THE LANCET

Health professionals for a new century: transforming education to strengthen health systems in an interdependent world

Julia Frenk*, Lincoln Chen*, Zulfiqar A Bhutta, Jordan Cohen, Nigel Crisp, Timothy Evans, Hanry Fineberg, Patricia Garcia, Yang Ke, Patrick Kebley, Barry Kitson, Arif Melek, David Nayak, Aidil Pablos-Mendez, Srinath Reddy, Susan Scrimshaw, Jaime Sepúlveda, David Serwadda, Huda Zaryak

Executive summary

100 years ago, a series of studies about the education of health professionals, led by the 1910 Flexner report, sparked groundbreaking reforms. Through integration of modern science into the curricula at university-based schools, the reforms equipped health professionals with the knowledge that contributed to the doubling of life span during the 20th century.

By the beginning of the 21st century, however, all is not well. Glaring gaps and inequities in health persist both within and between countries, underscoring our collective failure to share the dramatic health advances equitably. At the same time, fresh health challenges loom. New infectious, environmental, and behavioural risks, at a time of rapid demographic and epidemiological transitions, threaten health security of all. Health systems worldwide are struggling to keep up, as they become more complex and costly, placing additional demands on health workers.

Professional education has not kept pace with these challenges, largely because of fragmented, outdated, and static curricula that produce ill-equipped graduates. The problems are systemic: mismatch of competencies to patient and population needs; poor teamwork; persistent gender stratification of professional status; narrow technical focus without broader contextual understanding; episodic encounters rather than continuous care; predominant hospital orientation at the expense of primary care; quantitative and qualitative imbalances in the professional labour market; and weak leadership to improve health-system performance. Laudable efforts to address these deficiencies have mostly floundered, partly because of the so-called tribalism of the professions—ie, the tendency of the various professions to act in isolation from or even in competition with each other.

Redesign of professional health education is necessary and timely, in view of the opportunities for mutual learning and joint solutions offered by global interdependence due to acceleration of flows of knowledge, technologies, and financing across borders, and the migration of both professionals and patients. What is clearly needed is a thorough and authoritative re-examination of health professional education, matching the ambitious work of a century ago.

That is why this Commission, consisting of 20 professional and academic leaders from diverse countries, came together to develop a shared vision and a common strategy for postsecondary education in medicine, nursing, and public health that reaches beyond the confines of national borders and the silos of individual professions. The Commission adopted a global outlook, a multiprofessional perspective, and a systems approach. This comprehensive framework considers the connections between education and health systems. It is centred on people as co-producers and as drivers of needs and demands in both systems. By interaction through the labour market, the provision of educational services generates the supply of an educated workforce to meet the demand for professionals to work in the health system. To have a positive effect on health outcomes, the professional education subsystem must design new instructional and institutional strategies.

Major findings

Worldwide, 2420 medical schools, 467 schools or departments of public health, and an indeterminate number of postsecondary nursing educational institutions train about 1 million new doctors, nurses, midwives, and public health professionals every year. Severe institutional shortages are exacerbated by maldistribution, both between and within countries.



Lancet 2016; 376: 1923-58

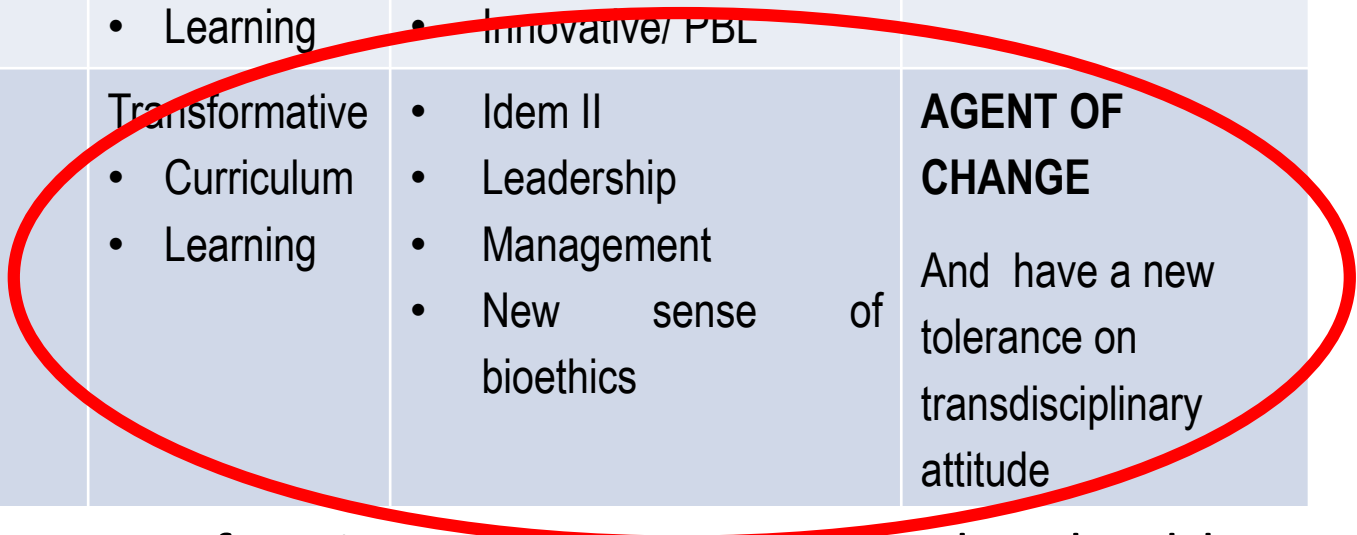
Published online November 29, 2016
DOI:10.1016/S0140-6736(16)03941-5
See Commentaries pages 1875 and 1877

*Joint first authors

Harvard School of Public Health, Boston, MA, USA (Prof Frenk MD); China Medical Board, Cambridge, MA, USA (Lin Chen MD); Aga Khan University, Karachi, Pakistan (Prof Zulfiqar Bhutta PhD); George Washington University Medical Center, Washington, DC, USA (Prof Jordan Cohen MD); Independent member of House of Lords, London, UK (Nigel Crisp FRCGS); James P Grant School of Public Health, Shiga, Bangladesh (Prof Timothy Evans MD); US Institute of Medicine, Washington, DC, USA (Dr Hanry Fineberg MD); P Kebley MD); School of Public Health, Universidad Peruana Cayetano Heredia, Lima, Peru (Prof Patricia Garcia MD); Peking University Health Science Centre, Beijing, China (Prof Yang Ke MD); National Health Laboratory Services, Johannesburg, South Africa (Dr Kitson MD); School of Nursing, University of Pennsylvania, Philadelphia, PA, USA (Prof Arif Melek PhD); University of Toronto, Toronto, ON, Canada (Prof David Nayak MD); The Rockefeller Foundation, New York, NY, USA (A Pablos-Mendez MD); Public

Frenk et al, 2010

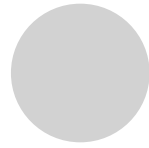
Century	Generation	Reformation	Objective/ Process	Output
20	I	Informative <ul style="list-style-type: none"> Curriculum Learning 	<ul style="list-style-type: none"> Information/ lecture Practice Examination 	EXPERT
	II	Formative <ul style="list-style-type: none"> Curriculum Learning 	<ul style="list-style-type: none"> Idem I Values Innovative/ PBL 	PROFFESIONAL
21	III	Transformative <ul style="list-style-type: none"> Curriculum Learning 	<ul style="list-style-type: none"> Idem II Leadership Management New sense of bioethics 	AGENT OF CHANGE And have a new tolerance on transdisciplinary attitude



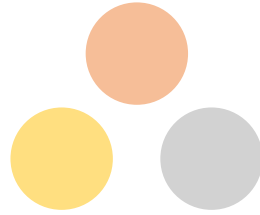
Health professionals for a new century: transforming education to strengthen health systems in an interdependent world

Mono, Multi, Inter, Transdisciplines (subjects) (Nicolescu B, 1999)

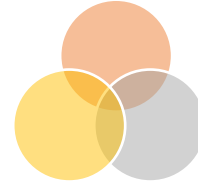
1).



Mono



Multi



Inter



Trans

2) Monodisciplinary Research

Used ONE methods

Multidisciplinary

Used the same/ ONE methods
between the disciplines

Interdisciplinary

Transfer the method to the other
discipline

Transdisciplinary

At once the discipline accross the
different discipline and beyond all
discipline

Paradigm Shifting

Individual teaching
Teachers' autonomy
Focus on subjects
Passive students' role
Today's agenda

to Team teaching
to Students' autonomy
to Focus meaning construction
to Involved students and community
to Lifelong learning

Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century

- **James W Pellegrino**
- Learning Sciences Research Institute, University of Illinois, Chicago

COGNITIVE SKILLS

INTERPERSONAL SKILLS

INTRAPERSONAL SKILLS

COGNITIVE DOMAIN



- The Cognitive Domain includes three clusters of competencies: cognitive processes and strategies; knowledge; and creativity.
- These clusters include competencies such as **critical thinking, information literacy, reasoning and argumentation, and innovation.**
- Conclusion: Cognitive competencies have been more extensively studied than interpersonal and intrapersonal competencies, showing consistent, positive correlations (of modest size) with desirable educational, career, and health outcomes. Early academic competencies are also positively correlated with these outcomes.

INTRAPERSONAL DOMAIN

- The Intrapersonal Domain includes three clusters of competencies: intellectual openness; work ethic and conscientiousness; and positive core self-evaluation.
- These clusters include competencies such as flexibility, initiative, appreciation for diversity, and metacognition (the ability to reflect on one's own learning and make adjustments accordingly).
- Conclusion: Among interpersonal and intrapersonal competencies, conscientiousness (a tendency to be organized, responsible, and hardworking) is most highly correlated with desirable educational, career, and health outcomes. Anti-social behavior, which has both intrapersonal and interpersonal dimensions, is negatively correlated with these outcomes.



INTERPERSONAL DOMAIN

- The Interpersonal Domain includes two clusters of competencies: teamwork and collaboration; and leadership.
- These clusters include competencies such as communication, collaboration, responsibility, and conflict resolution.
- Conclusion: Educational attainment—the number of years a person spends in school—strongly predicts adult earnings and also predicts health and civic engagement. Moreover, individuals with higher levels of education appear to gain more knowledge and skills on the job than those with lower levels of education, and to be able, to some extent, to transfer what they learn across occupations.



Challenges in Indonesia

- Cognitive domain:
critical thinking, information literacy, reasoning and argumentation, and innovation
- Intrapersonal domain:
flexibility, initiative, appreciation for diversity, and metacognition
- Interpersonal domain:
Communication, teamwork, collaboration, and leadership

Bangunan SKDI 2012



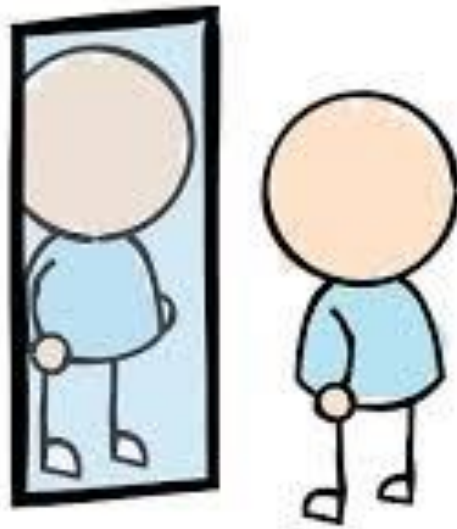
Gambar 2. Pondasi dan Pilar Kompetensi.

Teaching strategies

- **Using multiple and varied representations of concepts and tasks**, such as diagrams, numerical and mathematical representations, and simulations, combined with activities and guidance that support mapping across the varied representations.
- **Encouraging elaboration, questioning, and explanation**—for example, prompting students who are reading a history text to think about the author’s intent and/or to explain specific information and arguments as they read—either silently to themselves, or to others.
- **Engaging learners in challenging tasks**, while also supporting them with **guidance, feedback**, and encouragement to **reflect on their own learning processes** and the status of their understanding.
- **Teaching with examples and cases**, such as modeling step-by-step how students can carry out a procedure to solve a problem and using sets of worked examples
- **Priming student motivation** by connecting topics to students’ personal lives and interests,
- **Engaging students in collaborative problem solving**, and drawing attention to the knowledge and skills students are developing, rather than grades or scores.
- **Using formative assessment** to: a) make learning goals clear to students; b) continuously monitor, provide feedback, and respond to students’ learning progress; and c) involve students in self- and peer-assessment.

Refleksi

- Kebutuhan Pelayanan Kesehatan Indonesia di masa datang?
- Kebutuhan Pendidikan Tenaga Kesehatan yang mampu memenuhinya?





Pustaka

1. Pellegrino
2. Ki Hadjar Dewantara – buku kumpulan karya
3. UNESCO Human Development Skills 21st century
4. SDGs