



Integrated Care and Safety Issues in Aging Mental Health (IPA, Taipei 09.12.16)

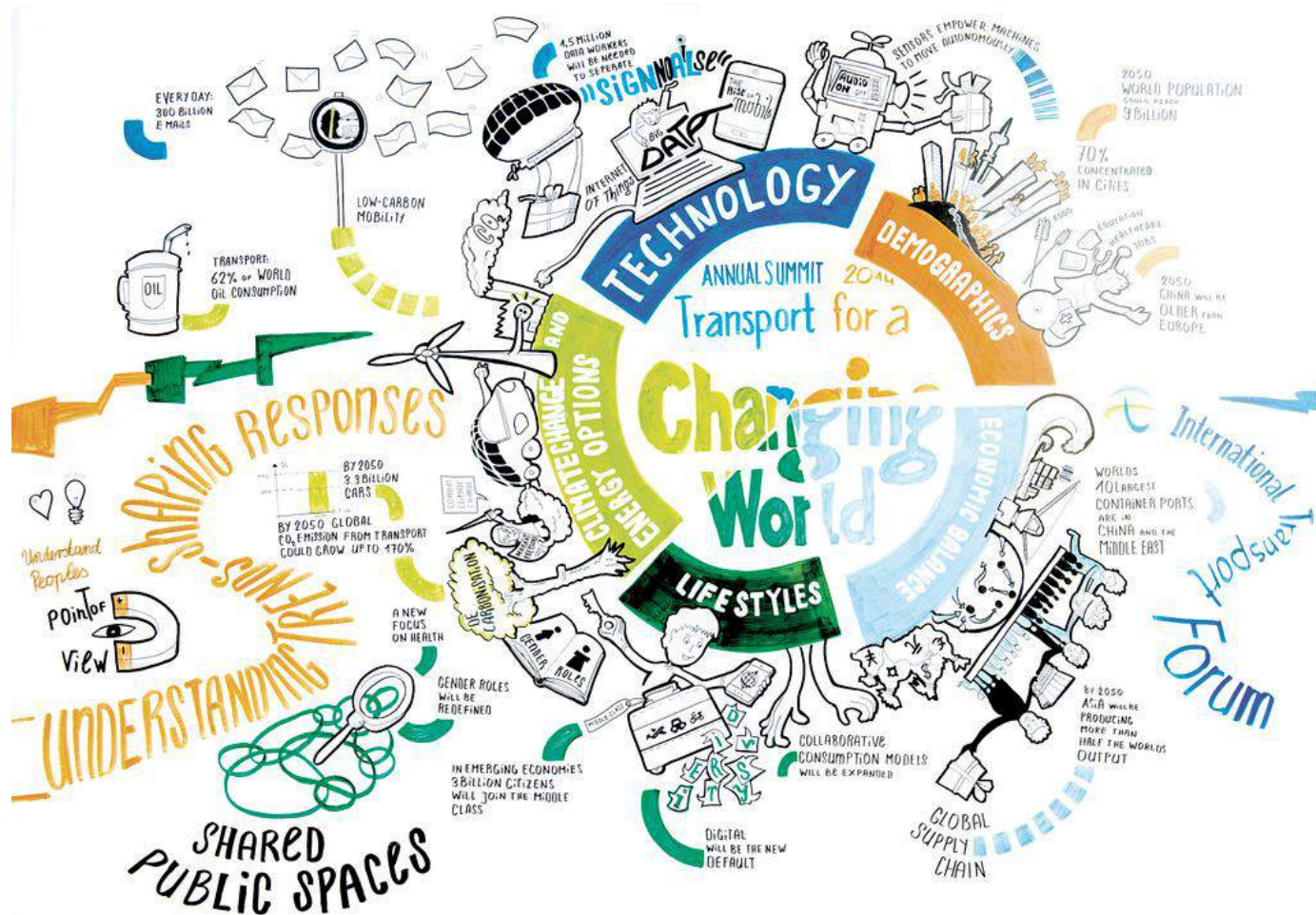
Never Stand Still

Medicine

Henry Brodaty



The world is changing



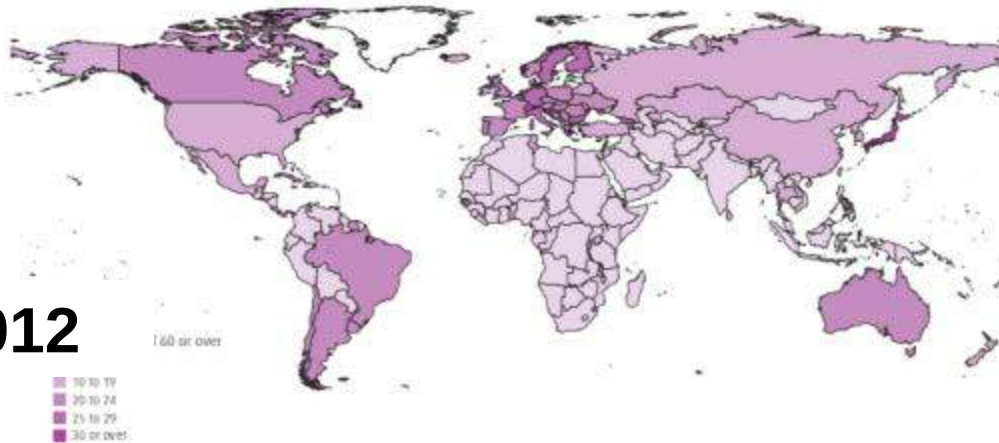
|ORANGE is the new BLACK|



Global ageing trends

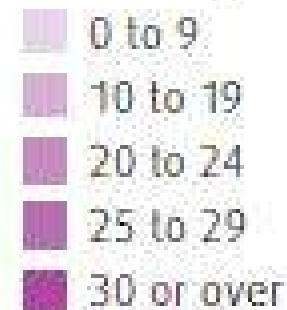
Percentage of the total population aged 60 or over, 2012

2012



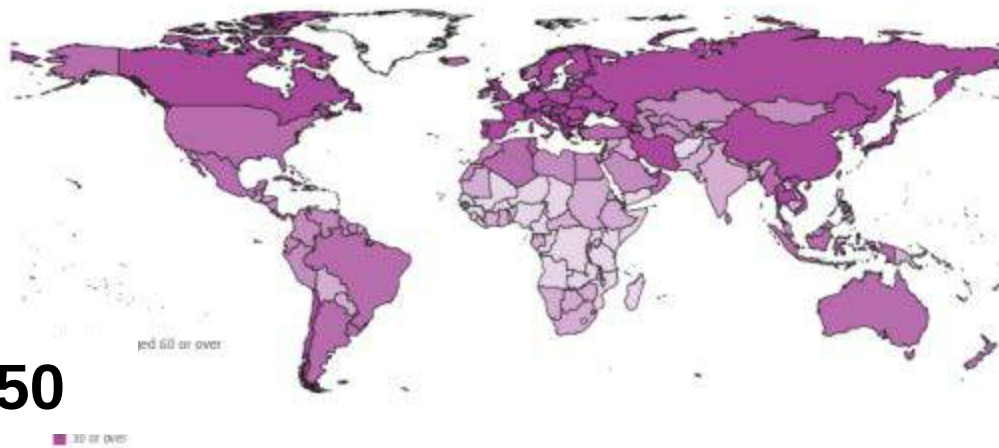
Percentage of population over 60 years

Percentage aged 60 or over



Percentage of the total population aged 60 or over, 2050

2050



World Health Organisation: http://www.who.int/world_health_day/2012

Outline

- **Our ageing world**
- **Ageing, mental health and health services**
- **A broader view of Health**
- **A broader view of Integrated Care**
- **Evidence for Integrated Care**
- **Safety**
- **Conclusions**

Outline

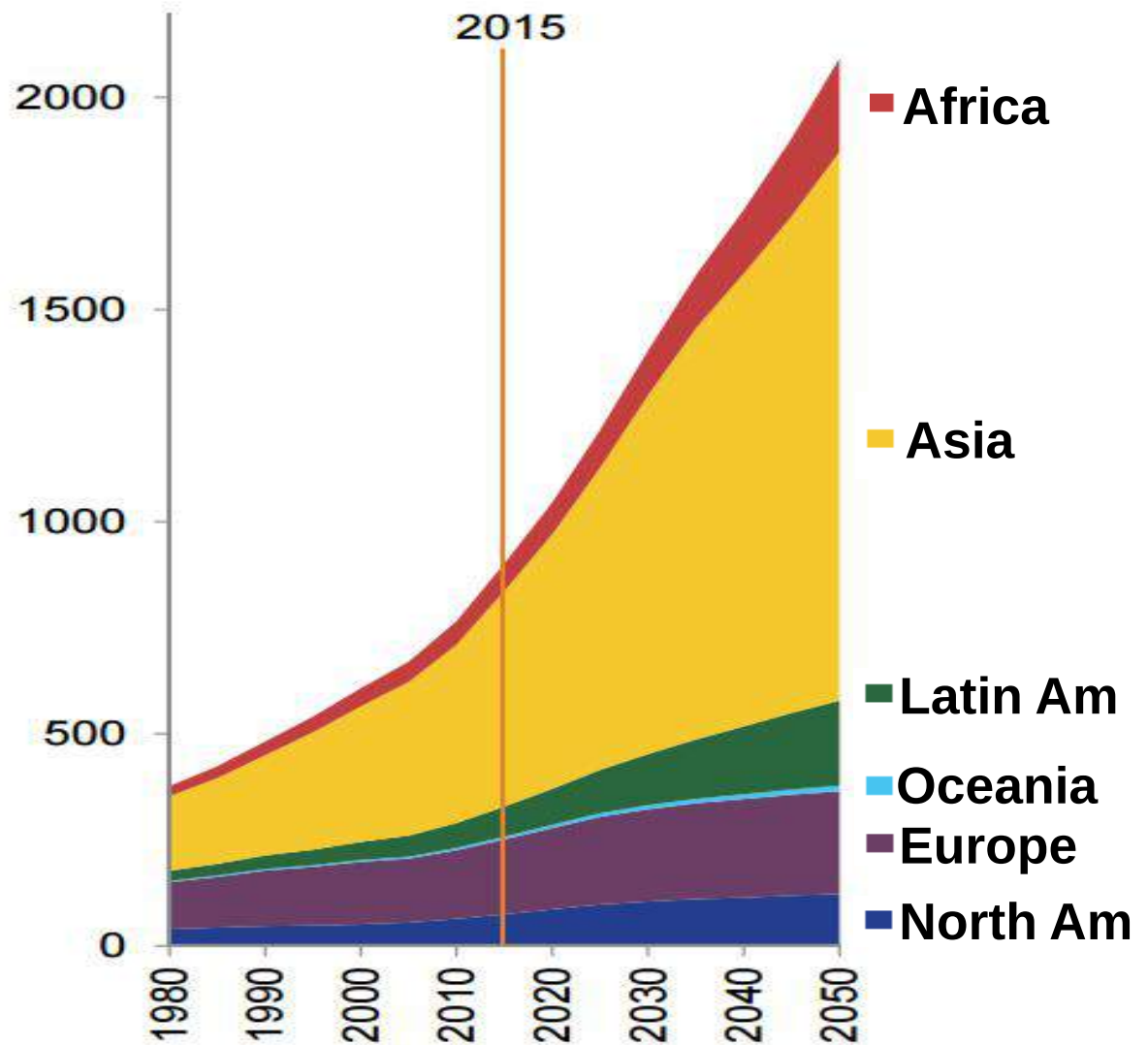
- **Our ageing world**
- Ageing, mental health & health services
- A broader view of Health
- A broader view of Integrated Care
- Evidence for Integrated Care
- Safety
- Conclusions



Global ageing trends

Population over 60 years (millions)

United Nations (2015).
World Population
Prospects: The 2015
Revision

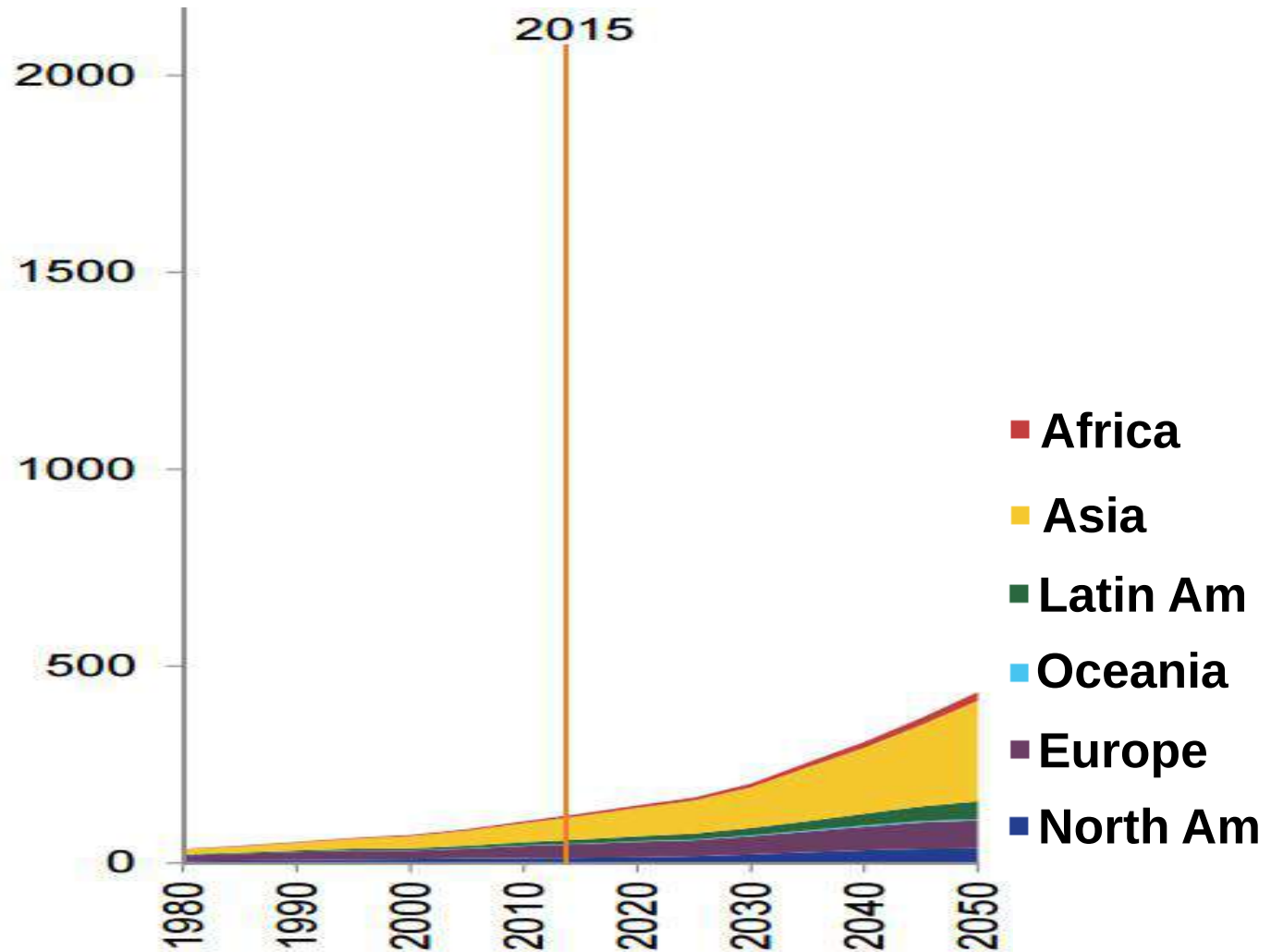




Global ageing trends

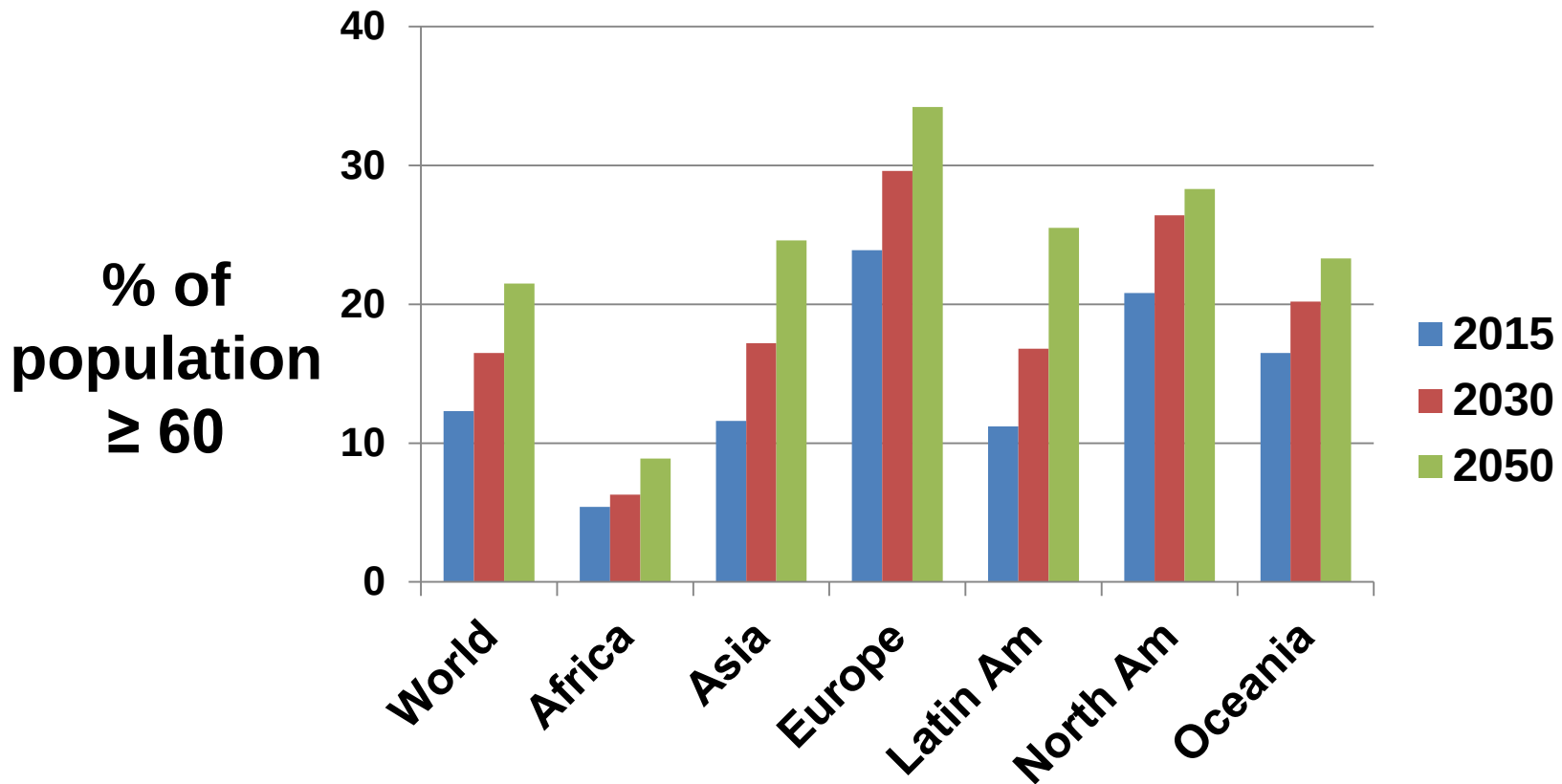
**Population
≥ 80 years
(millions)**

United Nations
(2015). World
Population
Prospects: The 2015
Revision





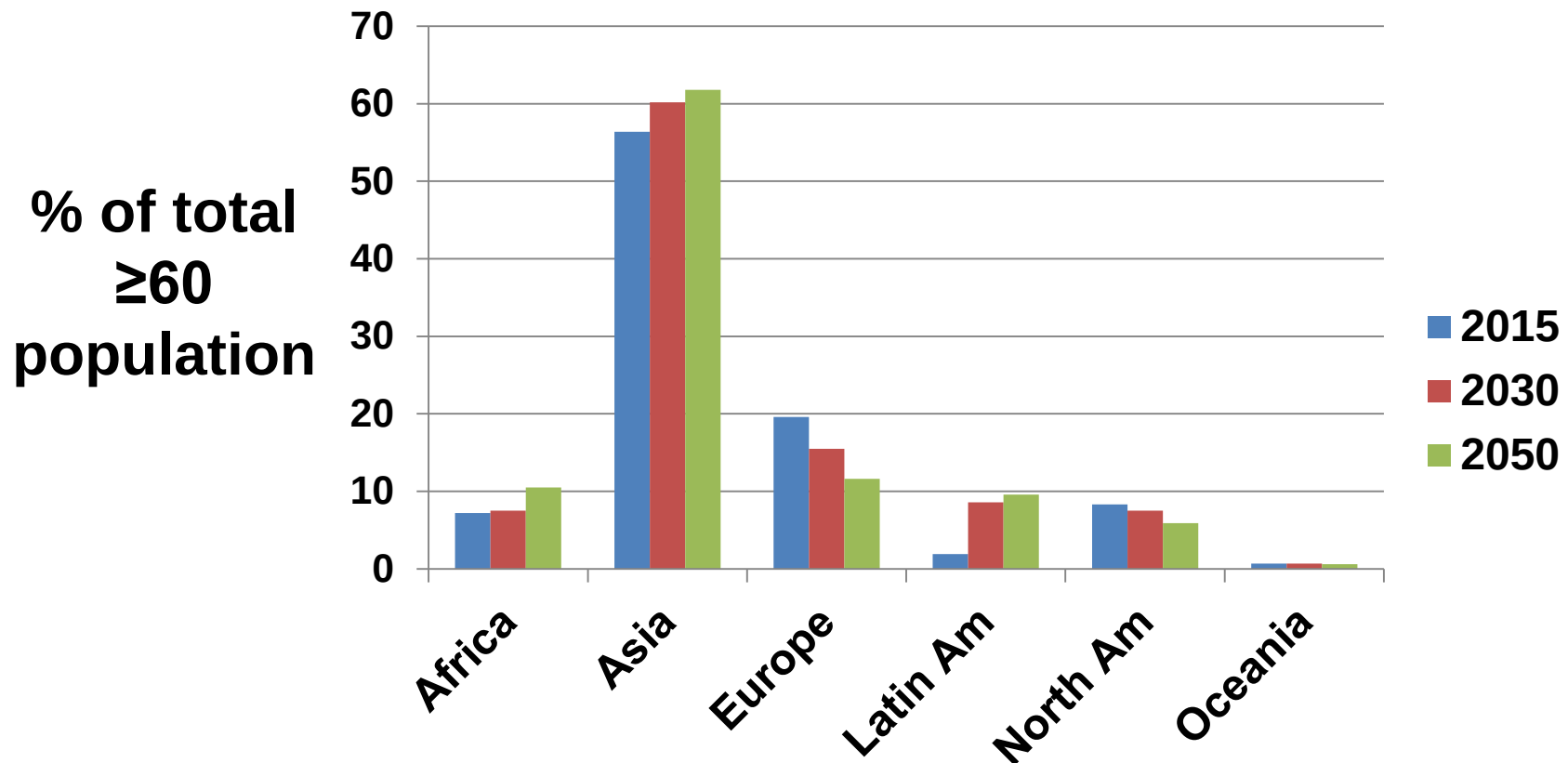
Percentage of population ≥ 60 by region



United Nations (2015). World Population Prospects: The 2015 Revision



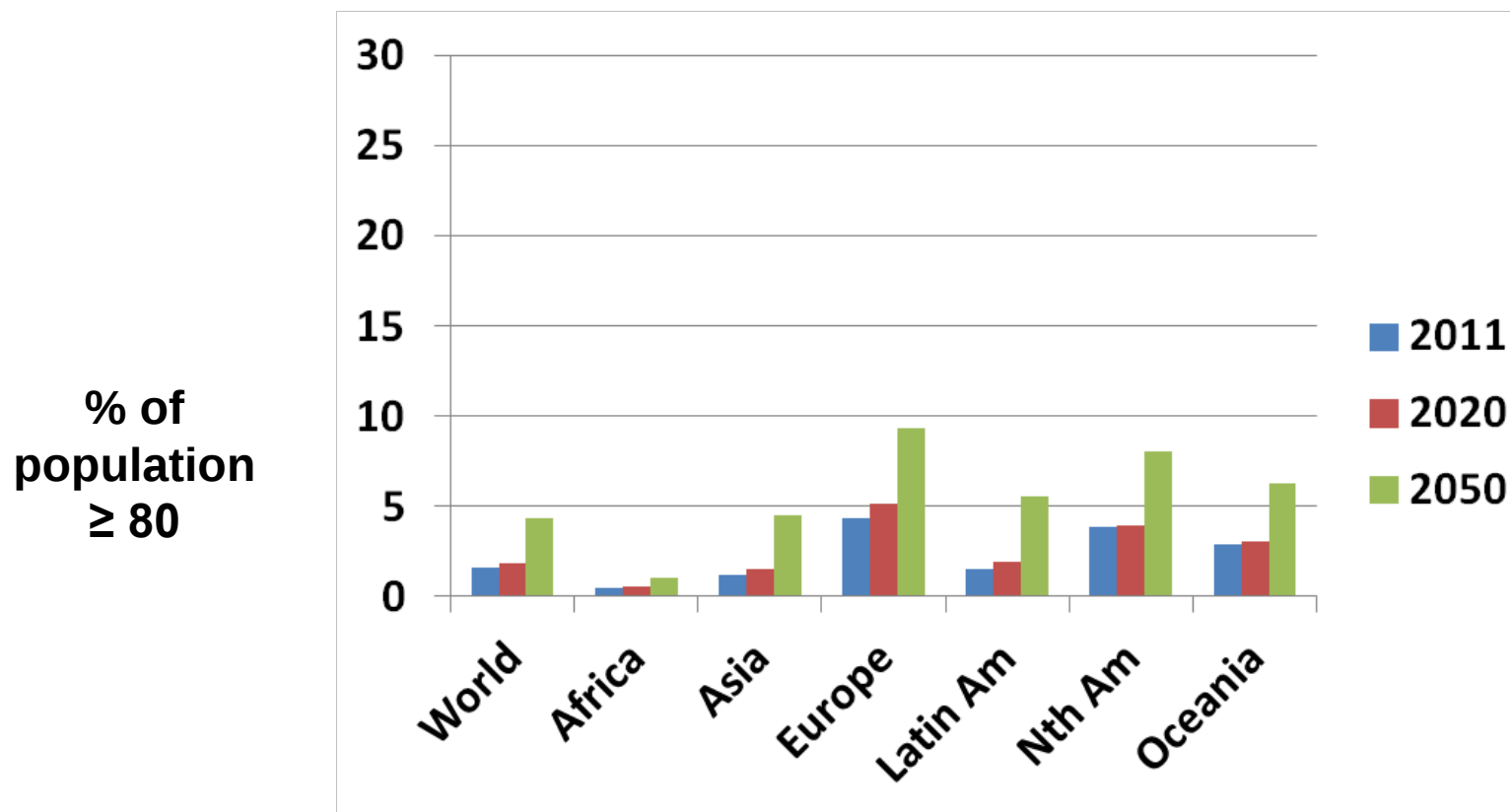
Distribution of population ≥ 60 by region



United Nations (2015). World Population Prospects: The 2015 Revision



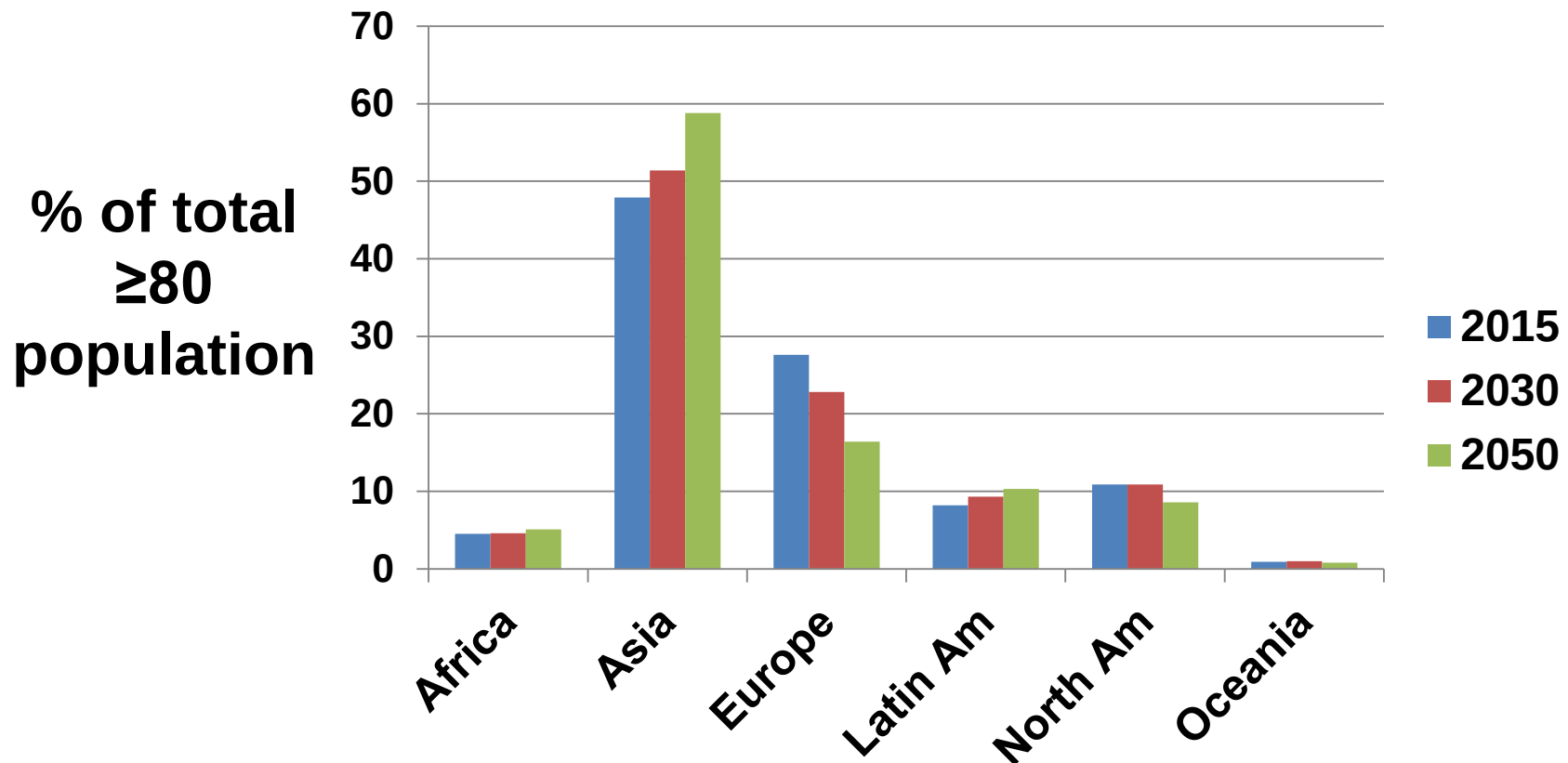
Percentage of population ≥ 80 by region



United Nations, Department of Economic and Social Affairs, Population Division



Distribution of population ≥ 80 by region



United Nations (2015). World Population Prospects: The 2015 Revision



Global ageing

- **Population ageing is global and occurring fastest in low and middle income countries**
- **By 2050 80% of older people (60+) will live in low-middle income countries**
- **Speed of this change is increasing**
 - **France - 100 yrs for percentage of 65+ to increase from 7% to 14%**
 - **Brazil, China, Thailand will experience a similar shift in just over 20 yrs**

World Health Organisation (2012) & United Nations (2015). World Population Prospects.

Japan: No longer Asia's fastest-aging nation?

Nyshka Chandran | @nyshkac
Thursday, 22 Jan 2015 | 5:48 PM ET



3 COMMENTS Join the Discussion



PATRICK LIN | AFP | Getty Images

Taiwan is set to surpass Japan as Asia's fastest aging nation this decade, experts warn, as a dwindling labor force poses a structural challenge to economic growth.

"An imminent issue Taiwan will face is population aging, it seems the aging trend is unfolding faster than forecasted," Societe Generale economist Claire Huang said in a recent note.



FROM THE WEB

Sponsored Links by Taboola



The Real Secret to Cheaper Foreign Exchange

CFX International Money



Got Health Insurance And Born Before 1962? Read this Now!

Health Insurance Comparison



Outline

- An ageing world
- **Ageing, mental health and health services**
- A broader view of Health
- A broader view of Integrated Care
- Evidence for Integrated Care
- Safety
- Conclusions

Estimated prevalence (millions) of mod/severe disability for people 60+

- **Depression prevalence (millions)**
 - **High income: 6.2**
 - **Low/middle income: 7.0**
- **Dementia prevalence (millions)**
 - **High income: 0.5**
 - **Low/middle income: 4.8**

World Health Organisation: http://www.who.int/world_health_day/2012

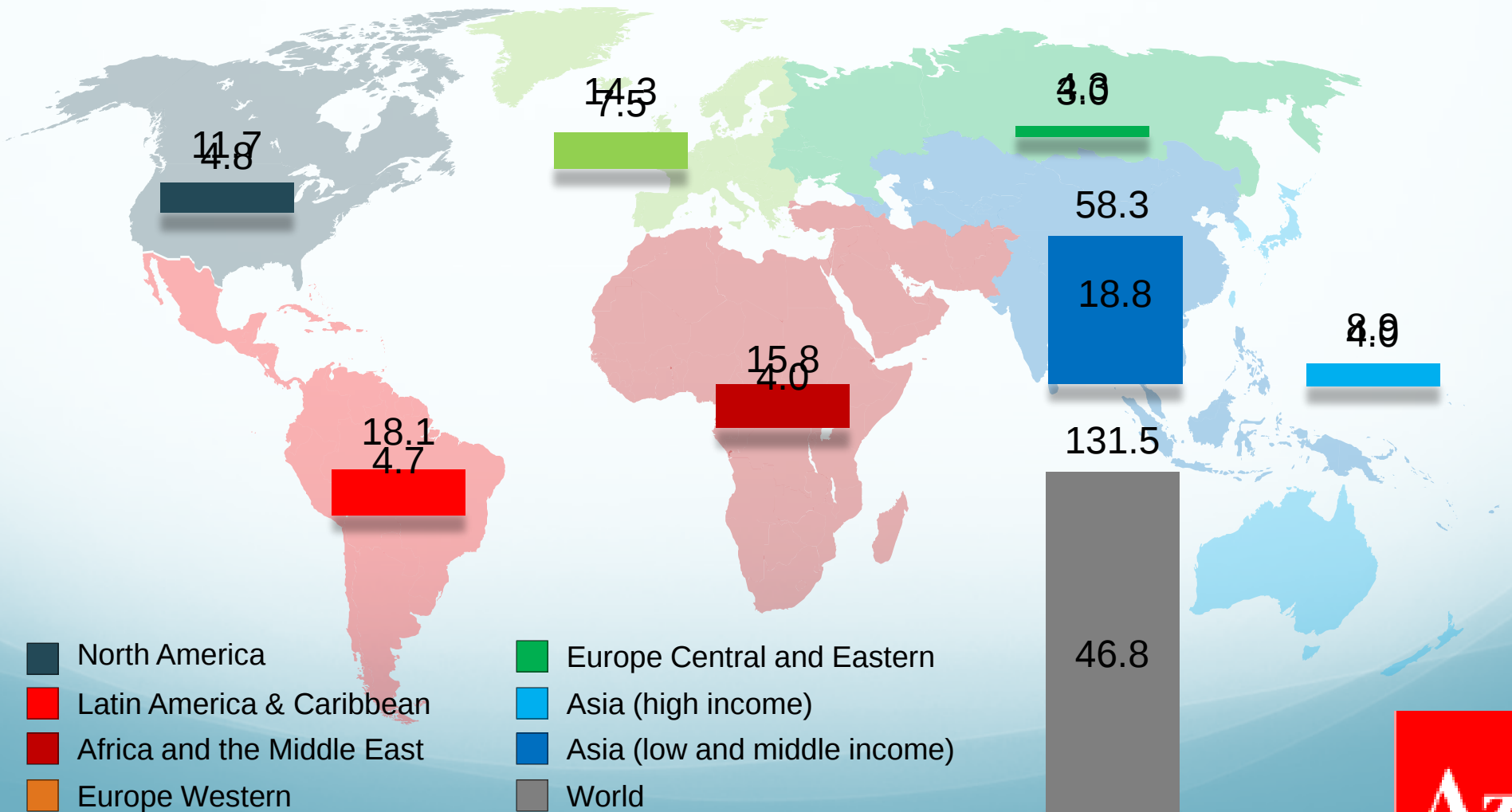
Mental health in elderly

	Prevalence
All mental illness, non-dementia	20%
Depression	5-10%
Major depression	1-5%
Anxiety disorders	6-12%
Psychotic syndromes	1.7-4.2%

Skoog I Can J Psychiatry. 2011;56(7):387–397

Numbers of people with dementia by world region (2015-2050)

2015 2020 2025 2030 2035 2040 2045 2050



Slide courtesy of Martin Prince



Psychiatric services



Psychiatric services globally

- **Policy & infrastructure**
 - 1 in 3 countries has no mental health policy
 - In African region this rises to nearly 1 in 2
 - Most countries have some disability benefits
 - 22% of all countries & 45% of low income countries exclude mentally ill people
- **Mental health services**
 - Community based in 52% Low income vs. 97% high income countries

Saxena et al. *Lancet* 2007; 370: 878–89

High vs low income countries

- Global spending on MH is < US\$2 pp/ year
 - In LMIC, <25c pp/ year
- MH legislation 92% Hi, 36% Low income
- Consumer organisations $n \leq 2x$ in hi income
- Outpatient services 58x more prevalent

WHO Mental Health Atlas, 2011

Number of psychiatrists by income

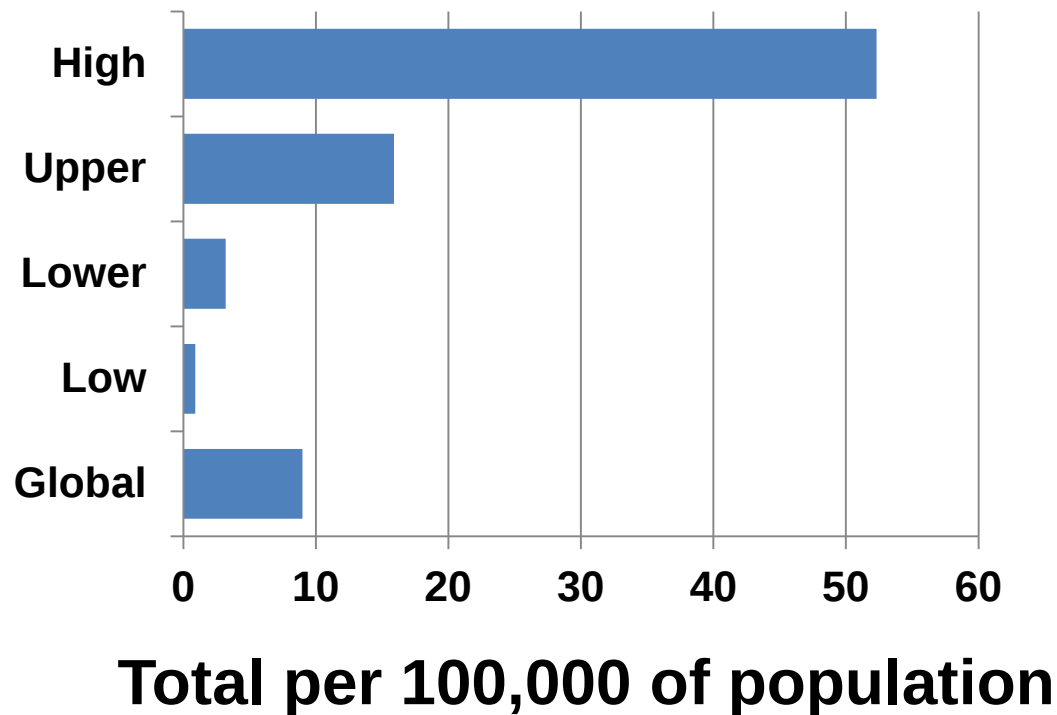
- Large differences in psychiatrists and other MH workers by income group
- Almost half world have <1 psychiatrist/100,000
- Median rate of psychiatrists per 100,000
 - Low: 0.05
 - Low-Middle: 0.54
 - Upper-Middle: 2.03
 - High: 8.59

World Health Organisation, *Mental Health Atlas: 2011*.



Total mental health workers per 100,000

Income Group
(World Bank definition
of economies)



World Health Organisation, *Mental Health Atlas: 2014*.



Median expenditure on medicines (\$US) per 100,000

	Mood stabilisers	Antipsychotics	Anxiolytics	Antidepressants
Low	320	400	320	200
Lower-Middle	2,720	11,480	4,500	10,140
Upper-Middle	3,480	16,350	5,740	15,120
High	71,420	1,099,800	315,560	796,880
World	41,870	247,920	94,880	310,110

World Health Organisation, *Mental Health Atlas: 2011*.

Health spending in LMIC

	% GDP spent on health	% Health budget spent on mental health
Ethiopia	5.9	?
India	4.2	0.06
Nepal	5.3	0.17
Nigeria	5.0	0.40
South Africa	8.4	4.50
Uganda	7.3	0.44

Outline

- An ageing world
- Ageing, mental health and health services
- **A broader view of Health**
- A broader view of Integrated Care
- Evidence for Integrated Care
- Safety
- Conclusions



- **WHO definition (1948):** *Health* is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity

What determines health?

**Socio-
environmental**

Interpersonal

Biological

Psychological

What determines mental health?

Socio-Environmental

- Role
- Accommodation
- Finances
- Supports

Interpersonal

- Relationships
- Family dynamics

Biological

- Genes
- CV disease
- Neoplasia
- Drug effects
- Infection

Psychological

- Internal schema
- Development
- Negative cognitions
- Grief



Biological

- Genes
- CV disease
- Neoplasia
- Drug effects
- Infection

Psychological

- Internal schema
- Development
- Negative cognitions
- Grief

Interpersonal

- Relationships
- Family dynamics

Social-Environmental

- **Role, occupation, leisure**
- **Meaning in life and meaningful activities**
- **Age friendly environments**
- **Access to health care: geographic, financial**
- **Employment opportunities**
- **Housing**
- **Transport**
- **Spiritual**



Interpersonal: Loneliness

- U.S. nationally representative sample of 2101 adults aged 50+ 2002 to 2008
- Feelings of loneliness associated with increased mortality over 6-year period
- Loneliness $\longleftrightarrow$ depression
- Loneliness (independent of depression) is a risk factor for morbidity and mortality

Y Luo 2012 Social Science & Medicine; 2012: 74; 907–914

Social relations and depression

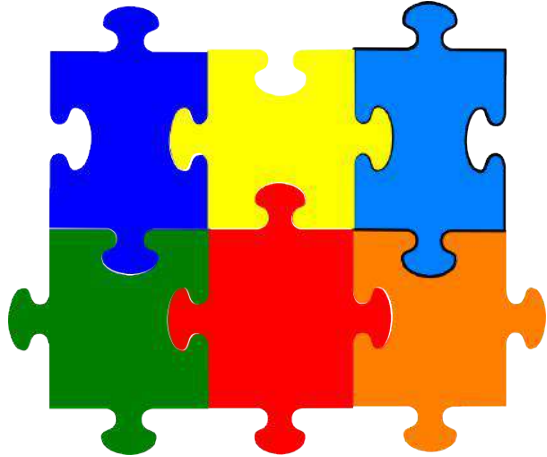
- **Review of 51 studies**
- **Significant protective effects of perceived emotional support, perceived instrumental support, and large, diverse social networks.**
- **Little evidence if social connectedness or negative interactions are related to depression**

Santini ZI J Aff Dis 2014

Outline

- An ageing world
- Ageing, mental health and health services
- A broader view of Health
- **A broader view of Integrated Care**
- Evidence for Integrated Care
- Safety
- Conclusions

Integrated care

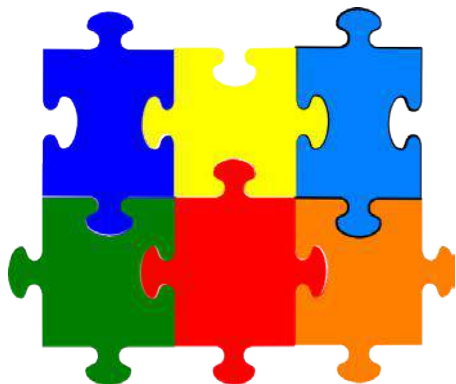


WHO definition

- Integrated care ... brings together inputs, delivery, management and organisation of services related to diagnosis, treatment, care, rehabilitation and health promotion
- Integration is a means to improve services in relation to access, quality, user satisfaction and efficiency

Gröne, O & Garcia-Barbero, M (2002): Trends in Integrated Care – Reflections on Conceptual Issues. World Health Organization, Copenhagen, 2002, EUR/02/5037864

Integrate with whom?



- Medical
- Nursing
- Social work
- OT
- Psychology
- Physiotherapy
- Aged care
- Community services
- Community groups
 - e.g. TADA
- Housing
- Transport
- Legal & financial

The missing piece?



- **The person must be at the centre of the service**

Settings for integrated care

- **Population**
 - eg prevention
- **Primary care**
- **Community health**
- **Nursing homes**
- **Acute hospital**
- **Hospice**



Vertical & Horizontal integration



- **Vertical integration**



- **Horizontal integration**

Gröne, O & Garcia-Barbero, M (2002): Trends in Integrated Care – Reflections on Conceptual Issues. World Health Organization, Copenhagen, 2002, EUR/02/5037864

Vertical integration



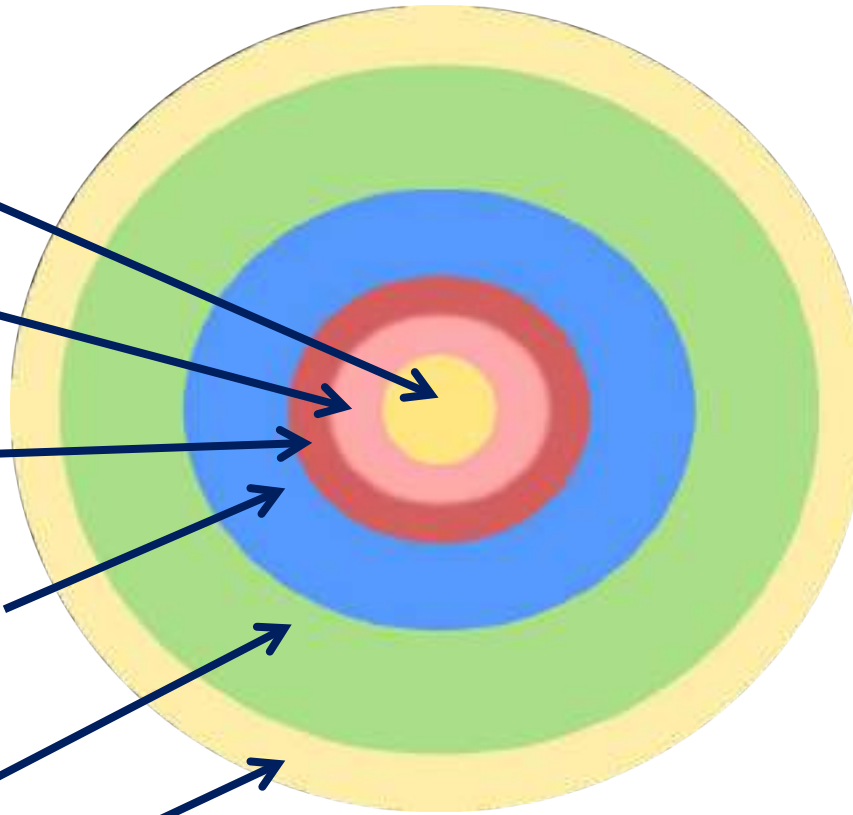
Vertical integration

- linking different levels of care
- primary, secondary and tertiary care

Vertical Integration

- **Hospital/ hospice**
 - Admission procedures
 - During admission eg GP with specialist team
 - Discharge handover
 - To GP
 - To nursing home
- **Office practice**

- **Person**
- **Family**
- **Primary health**
- **Secondary health**
- **Tertiary health**
- **Context**



- **Prevention**
- **Life-course**
- **Population**
- **Community**
- **Hospital**
- **Hospice**
- **Long-term**

Horizontal integration



Horizontal integration

- linking similar levels of care
- multi-professional or multi-disciplinary teams

How does integration occur?

- Is it organic?
- Does it need a coordinator?

Integrated care in dementia

- Person with dementia
- Family
- Primary care
- Outpatient services
- Memory clinic
- Specialist services
- Community nurses
- Aged care workers
- Day care centre
- Respite care
- Alzheimer's Assoc^{ns}
eg TADA
- Legal, financial
- Home help
- Professional brokers

Who is conductor of the orchestra?



- **Patient**
 - **Consumer Directed Care**
- **Family carer**
- **Professional coordinator**
 - **Key worker**
- **GP**
- **Community nurse**

Outline

- An ageing world
- Ageing, mental health and health services
- A broader view of Health
- A broader view of Integrated Care
- **Evidence for Integrated Care**
- Safety
- Conclusions

Health care of the elderly

- **Combined geriatric and psychogeriatric ward**
 - eg delirium vs mania
 - **BPSD vs acute medical illness**
 - **Comorbidity is common**

- **Arie T, *Health Care of the Elderly*, 1981**

Acute hospital and consultation-liaison psychogeriatrics

- **Review of benefits of acute hospital service delivery in old age psychiatry → 46 studies¹**
- **Only RCTs were C/L and delirium prevention**
- **Evidence for interventions to prevent delirium, reduce costs and length of stay (LOS) in medical wards (level II outcomes)¹**
- **Decreased length of stay with PG C/L service²**

¹ **Draper B, Low LF, Int Psychoger, 2005**

² **Desan PH et al, Psychosomatics 2011; 52:513–520**

Collaborative Care Management for Depression in Primary Care

- **IMPACT Intervention**
 - **Education for patient and pt preferences**
 - **Depression manager (nurse/ psychologist)**
 - **Team psychiatrist and liaison PCP**
- **→ Treatment plan → pt's PCP (a'depressants and/or Problem-Solving Therapy for 1⁰ Care)**
- **Pleasurable events**
- **Additional health & social services as needed**

Unutzer J, JAMA; 2002;288:2836-2845

Collaborative Care Management for Depression in Primary Care

- **At 12 m, Intervention compared to UC groups**
 - **$\geq 50\%$ ↓ depressive Sx: 45% v 19% in UC**
 - **> depression Rx, < depression severity**
 - **> satisfaction with care**
 - **less functional impairment**
 - **better QOL**
- **Cost effective?**

Unutzer J, JAMA; 2002;288:2836-2845

Integrated Model of Psychosocial Rehabⁿ & Health Care Mx for Older Adults w SMI¹

- **≈ 2% of older adults in US have serious mental illness (SMI eg Sz, BAD, Refractory Depression, Psychosis) & persistent functional impairment requiring ongoing supportive services**
 - **↓ social function, impaired living skills**
 - **more physical health problems, poorer health practices, poorer access to services**
- **Helping Older People Experience Success HOPES**
 - **Psychosocial rehabilitation +**
 - **Health care Mx & health promotion by nurse**

Helping Older People Experience Success

- **HOPES program (n = 183) , RCT**
- **ITT significant improvements for older adults in HOPES vs usual care in:**
 - **social skill**
 - **psychosocial and community functioning**
 - **negative symptoms**
 - **self-efficacy**
- **Effect sizes moderate (.37–.63)**

Meuser KT, Pratt SI et al J Consulting and Clinical Psychology, 2010;78:561-573

Integrated IMR for Psychiatric and General Medical Illness for Adults Aged 50 or Older With Serious Mental Illness¹

- **8 month program combining training in self-Mx for psychiatric and general medical illness, including embedded nurse care management**
- **improving self-management of psychiatric illness and diabetes**
- **→ fewer psychiatric or general medical hospitalisations**

Barthels SJ et al *Psychiatric Services* 2014;65:330–337

Integrated care in depression

- **Gilbody S et al. Collaborative care for depression: a systematic review and cumulative meta-analysis. Arch Intern Med 2006;166:2314–21 → 37 RCTs**
- **Thota AB et al. Collaborative care to improve the management of depressive disorders: a community guide systematic review and metaanalysis. Am J Prev Med 2012;42:525–38 → further 32 RCTs**



Integrated care in depression

- **Robust evidence of collaborative care in**
 - improving depression Sx (SMD =0.34)
 - adherence to treatment (OR=2.22)
 - response to treatment (OR=1.78)
 - remission of symptoms (OR=1.74)
 - recovery from symptoms (OR=1.75)
 - quality of life/functional status (SMD=0.12)
 - satisfaction with care (SMD=0.39)
- **Thota AB et al. Am J Prev Med 2012;42:525–38**

Integrated Care for Older Adults

- **Care Team = elderly care physician, community nurse, and social worker. (Netherlands)**
- **Training for team and GPs eg multimorbidity, polypharmacy (3 days)**
- **Social workers and district nurses received specific training (8 days)**
- **Teams received monthly on-the-job coaching**
- **The Elderly Care Team provided comprehensive, patient-centred, proactive, and preventive care and support**

Uittenbroek RJ et al. J GEN INTERN 2016, pp1-8



Integrated Care for Older Adults

- **Team met monthly at participating GP practices**
- **Intensity and focus of care & support at patient level differed by risk profile**
- **Pts with “Frail” and “Complex care needs” received individual care and support from a case manager, a social worker, and community nurse**
- **Home visits 1-2x/ month**
- **Review medical files, medications, and self-reported levels of frailty & case complexity 1/year**
- **Self-management support and prevention**
 - **eg community meetings, newsletters, healthy lifestyles abilities**

Integrated Care for Older Adults

- Small self-reported improvement in quality of care as reflected (ES $d = 0.19$).
- Most improvement for the “Frail” and “Complex care needs” risk profiles
- No signif advantages for “Robust” risk profile
- Professionals rated Quality and Integration of Care as significantly improved
- Effects most evident for older adults receiving case management

Uittenbroek RJ et al *J Gen Intern Med* 2016, pp1-8

doi:10.1007/s11606-016-3742-y

Integrated care data publications

- Few papers, complex studies, results positive but not overwhelming
- Less funding for health services research

Examples of integrated models in dementia

The Memory Clinic

- 2^o or 3^o service
- Multidisciplinary assessment and care planning
- Vertical integration with primary care and community services
- Limited evidence of superiority
- Very comprehensive assessment, good planning, post-diagnostic services
- Excellent training, research base

Banerjee S et al, IJGP 2007; 22:782-788

Woodward MC, Woodward E, Int Psychoger 2009; 21:696-672

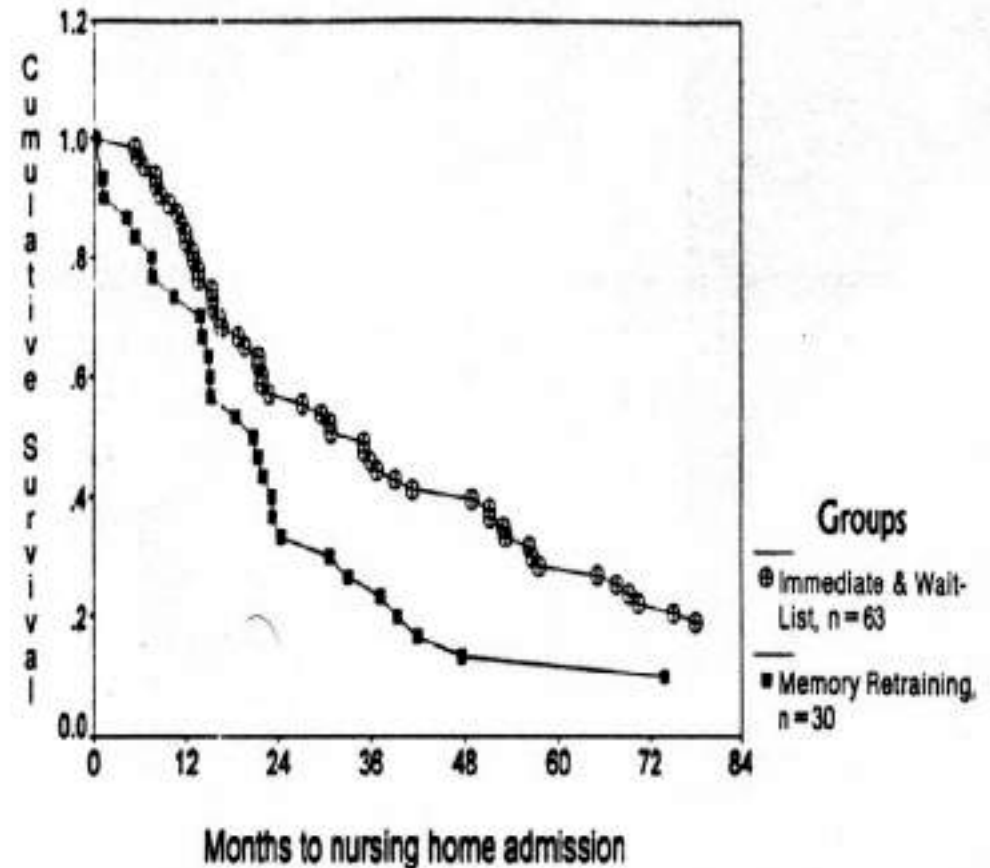
The Dementia CGs' Program

- Ten day program for patients and CGs
- Intensive, comprehensive, multidisciplinary
- Family session – *Psychogeriatrician*
- Psychological counselling - *Psychologist*
- Information, education – *S/W*
- Skills training – *OT*
- Social Services – *Welfare Officer*
- Physical care – *Registered nurse*
- Involvement of patient & extended family

¹Brodaty and Gresham (1989), Brit Med J; 299: 1375-1379

Dementia Carers Program: survival at home over 7 years

- Decreased CG psychological morbidity 12m
- Person with dementia stayed at home longer
- Saved money



Brodaty & Gresham BMJ 1989

Brodaty+ Int Psychoger 2001

Brodaty et al IJGP 1997

(Odds ratio 5.03, 1.73- 14.7)



Tailored Activity Program

- In-home training for CGs to manage BPSD
- 4-month (8 sessions) occupational therapy intervention tailored based on neuropsychological and functional testing
- Fewer problem behaviours (specifically for shadowing and repetitive questioning)
- Greater participant activity engagement
- Caregiver benefits (fewer hours on duty)
- Cost-effective

Gitlin LN et al. Am J Geriatr Psychiatry 2008 & 2010



CAPABLE trial

- **Community Aging in Place - Advancing Better Living for Elders: pt-directed, team-based intervention 5-month in-home services by an outreach worker, an Occupational Therapist, a Registered Nurse, and a handyman**
- **Community-dwelling older adults with functional limitations, dually Medicare & Medicaid eligible**

Szanton et al. JAGS 2015



CAPABLE trial

- **79% of participants improved their self-care**
- **On average, the number of self-care tasks that participants had difficulty with were halved**
- **Decrease in depressive symptoms similar to that of anti-depressant medication**

Szanton et al. JAGS 2015

Regular Early Assessment Post-Discharge (REAP) (Cordato N et al)

- **Prospective RCT, NH residents recently discharged from hospital**
- **REAP intervention: monthly coordinated specialist geriatrician and nurse practitioner assessments within residents' NHs for 6m**
- **43 NH residents → REAP intervention (n=22) or control (n=21) groups**

REAP intervention

- REAP group had almost 2/3 fewer hospital readmissions ($p=0.03$; Cohen's $d=0.73$) and half as many ED visits than controls
- Total costs were 50% lower in the REAP intervention group

Cordato N et al, in preparation

Prevention of dementia

- Physical exercise → Exercise physiology
- Cognitive exercise → Neuropsychologist
- Diet → Dietitian
- Smoking → Quitline
- Blood pressure, cholesterol → GP
- Diabetes → diet, exercise, GP, endocrinology
- Midlife obesity → diet, exercise, GP

Prevention of dementia

- Physical exercise → Exercise physiology
- Cognitive decline → Neuropsychologist
- Diet → Dietician
- Smoking → Quitline
- Blood pressure, cholesterol
- Diabetes → diet, exercise, GP, endocrinology
- Midlife obesity → diet, exercise, GP

**WHO INTEGRATES THIS?
ROLE FOR GPs**

Prevention of dementia?

- **Hearing loss**
- **Socialisation**
- **Oral health**

Hearing loss



Hearing loss and incident dementia

- **Lin 2011** **RR 2.32 (1.32-4.07)**
- **Gallacher 2012** **RR 2.67 (1.38-5.17)**
- **Deal 2016** **RR 1.55 (1.10-2.19)**
- **Peripheral hearing loss associated with significant risk for dementia**
- **Follow-ups 9,12 and 17 years**

Correcting hearing loss



- No evidence that correcting hearing loss prevents cognitive decline
- Mechanism unclear
 - Less cognitive stimulation
 - Less socialisation

Brain health & social isolation

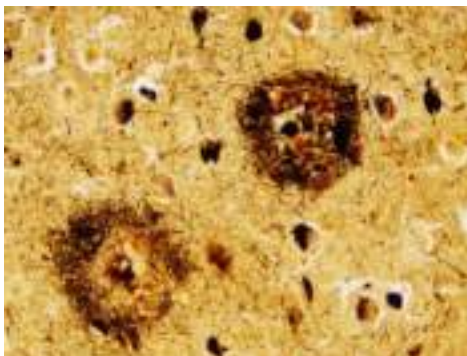


Socialisation and dementia

- The association of dementia risk with less socialisation is of same magnitude as dementia associations w. late-life depression (OR: 1.85); & AD with physical activity (1.82)
- What is mechanism?: Use it or lose it? Less stress? Better health behaviours? Better access to health services?

Kuiper JS et al *Ageing Research Reviews* 2015;22:39–57

Social network and AD pathology



- 89 older people, no known dementia, Rush Memory and Aging Project, annual evaluation → autopsy
- Social network size – n° of people they saw monthly, Cognitive function, AD pathology - amyloid load and tangles (density of PHFs)
- More disease pathology, worse cognition

(Bennett DA, Lancet Neurology 2006)

Social network and AD pathology

- **Social network size modified association betwⁿ pathology and cognition function (p 0.016)**
- **Similar modifying associatⁿ w. tangles (p 0.001)**
- **Social networks may modify relationship of AD pathology to level of cognitive function**
- **Controlled for cognitive, physical, and social activities, depression, chronic diseases**

(Bennett DA, Lancet Neurology 2006)

Oral health



Oral health diseases

- Diseases highly prevalent in elderly
- Associated with greater physical frailty, medical comorbidities, polypharmacy, cognitive impairment & functional dependence
- Lead to pain, impaired general health and reduced quality of life , affect, mood, behaviour, self-esteem and social interaction
- Associated with adverse health outcomes e.g. cardiovascular & respiratory disease, diabetes

Siegel E et al, *J Nutrition, Aging & Health*, 2016

Improving oral health

- Educational interventions for nurses &/or residents, focusing on knowledge and skills related to oral health management have potential to improve residents' oral health
- Two reviews this year – lack of evidence

Seigel E et al, J Nutr, Aging & Health 2016

Albrecht M et al. Cochrane review 2016

Improving oral health

- **Pilot study (n = 8), 12 hours training nurses**
- **Dentist, oral hygienist, nurses, resident, family**
- **Assessed saliva, pH, devised daily oral health care plans, supervised over 10 weeks**
- **Compliance with oral health care plans was very high and untrained nurses were able to follow the multiple scheduled interventions**

Deutsch A et al, submitted

Integrated care in LMIC

??

Cuba's public health system

- **≈ 500 polyclinics integrate range of services under one roof each serving 30k-60k people**
- **Social, environmental, economic and medical**
- **Clinics in factories, schools, etc**
- **Visit every family $\geq 1/\text{yr}$**
- **Cross-government policies, cooperation**
- **Impressive life expectancy and low infant mortality**

Siegel S et al, Report of the WISH Healthy Populations Forum, 2016

Thanavampalle Mandal, India

- Deprived rural area, Total Health
- Mobile clinics → basic health care to 104 villages
- Targeted care for chronic diseases
- Health education, yoga classes
- Food, nutrition for pregnant mothers, children
- Water, sanitation infrastructure

Siegel S et al, Report of the WISH Healthy Populations Forum, 2016

Future of integrated care

- **Use of IT**
- **Participatory health**
- **E-health records**
- **Registries**
- **Revolution in e-technology**
 - **Wearable monitoring devices**
- **Precision medicine**
 - **Omics revolution – genomics, etc**

Outline

- An ageing world
- Ageing, mental health and health services
- A broader view of Health
- A broader view of Integrated Care
- Evidence for Integrated Care
- **Safety**
- Conclusions

Safety

- **Drugs**
- **Medical abuse, neglect**
- **Safety vs autonomy**

The bio-psycho-social framework

Adequate space

Privacy

Individualised activities

Lighting

Socio-environmental

Home-like

engagement

Interpersonal

Pleasurable events

Person-centred

Secure grounds

Appropriate stimulation

Intrinsic

Extrinsic

Genes

Sensory impairments

Pain

Biological

Medication

Chemical changes

Frontal pathology

Basic needs
(hunger, thirst)

dance therapy

Volunteers

Intergenerational

Psychological

Humour therapy

engagement

Music, singing

Altered Pharmacokinetics In Elderly *Start lowgo slow*

- Increased bioavailability, lower plasma albumin and less protein binding
- decreased clearance by liver and kidney
- fat stores usually increased, elimination of lipid-soluble drugs slower
- overall: higher steady-state plasma levels for any given dose in older patient

Drug Rx in older people

- Multiple drugs - multiple interactions
- Compliance eg forgetful patient, practical difficulties (vision, arthritis)
- ↑ susceptibility to side effects
 - orthostatic hypotension, falls, # femur
 - glaucoma, prostatism, cardiac disease
- Anticholinergic load
- Informed consent
 - 6.5% in one study of NHs and 1% in HALT



Antipsychotics for BPSD



- Meta-analysis from 13 studies¹ :
 - Mean ES in Rx = 0.45
 - Mean ES in placebo = 0.32

- Side effects
 - Sedation
 - Dizziness
 - Falls
 - Orthostatic hypotension
 - Anticholinergic
 - Weight gain
 - Stroke²
 - Death³

¹ Yury C & Fisher J, Psychotherapy and Psychosomatics 2007

² Brodaty H et al, J Clin Psychiatry 2003

³ Schneider L, 2005



Continuing vs stopping anti-psychotics in dementia patients?

Ballard 2008

- 12 months RCT, continuous use vs placebo
- For most AD pts, withdrawal → no detriment
- Continuers: ↓ verbal fluency ($p < .002$); ↑ mortality
- Subgroup, pts with more severe symptoms might benefit from continued Rx

Devanand 2012

- Pts who responded for psychosis or agitation
- Discontinuation → higher rate of relapse



The HALT study

Halting Antipsychotic use in Long-Term care



- A single arm 12-month longitudinal study in 24 aged care facilities of at least 60 beds in urban and rural NSW
- Resident participants assessed $\approx$ 4 weeks & 1 week prior to deprescribing
- Re-assessed 3, 6 and 12 months later



HALT Protocol

Education:

- **GPs (academic detailing)**
- **Train the trainer model, 3-day workshop for nurse champions**
- **Champions trained residential care staff**
- **Community Pharmacists engaged with dispensing pharmacies**

Resident flow

- **150 completed pre-baseline (10 ineligible/ 1 revoked)**
- **134 completed baseline (4 died, 2 dropped out)**
- **133 started deprescribing**
- **125 completed deprescribing**
- **133 completed 3 months follow-up**
- **117 completed 6 months follow-up**
- **104 completed 12 months follow-up**

Represcribing antipsychotics

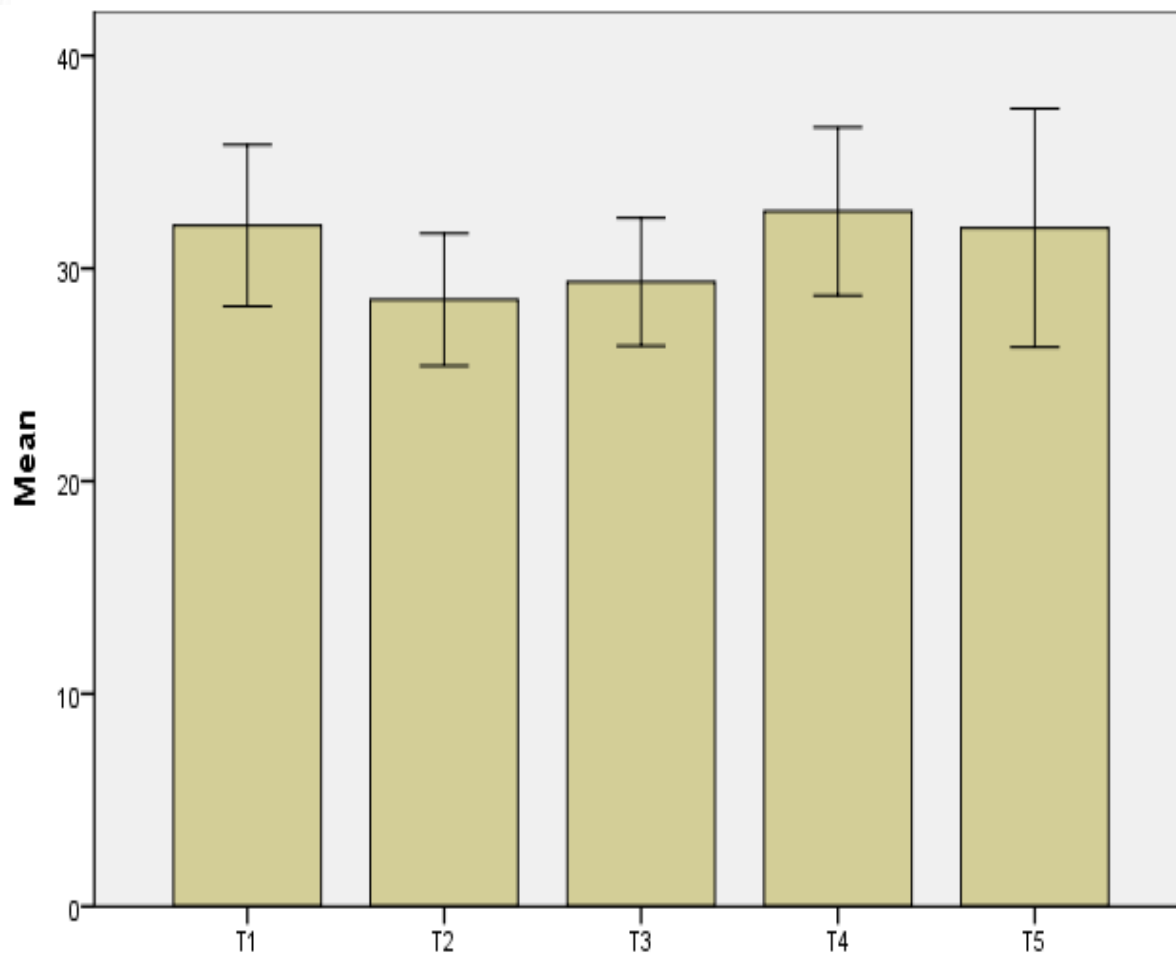
<i>Regular antipsychotics</i>	<i>PRN</i>
• 0-3 months = 14/125 (11.2%)	4
• 3-6 months = 10/114 (8.8%)	4
• 6-12 months = 3/100 (2.4%)	4
• Total = 27/125 (21.6%)	

98/133 in trial or 74% successfully deprescribed



Neuropsychiatric symptoms

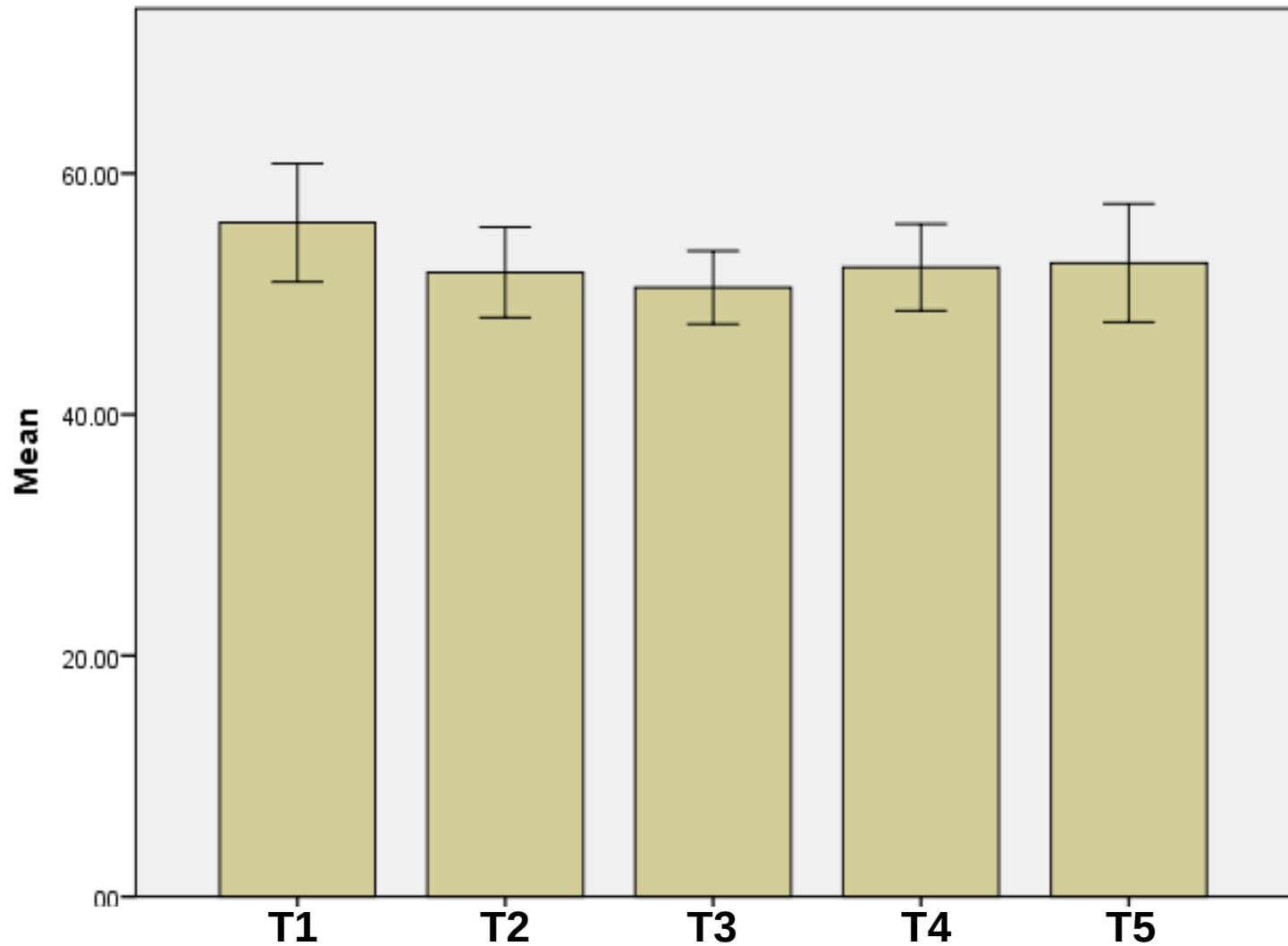
Mean Total NPI over time



T1 = Pre-B
T2 = Baseline
T3 = +3m
T4 = +6m
T5 = +12m



Agitation (CMAI)



Other safety issues

- **Abuse**
 - **Physical, psychological**
 - **Neglect**
 - **Medical abuse – neglect, restraint**
- **Falls, gait**
- **Driving**
- **Autonomy vs protection**

Conclusions

- Ageing population world, esp. Asia
- High prevalence psychiatric disorders
- Mental health workforce globally
 - Psychiatry in general
 - Old Age Psychiatry
- Training in Old Age Psychiatry
- Old age mental disorders – not linear
- Integrate *Our Challenge*

Conclusions

- **Good psychogeriatric care must be integrated**
- **Integration must include the patient and the family as partners if not directors**
- **Integration is vertical, horizontal and circular!**
- **Better integration should reduce costs**
- **Key components are structure, organisation and communication**
- **Safety must always be considered**



International Psychogeriatric Association
Better Mental Health for Older People

[About IPA](#)

[Forums](#)

[Publications](#)

[Meetings and Education](#)

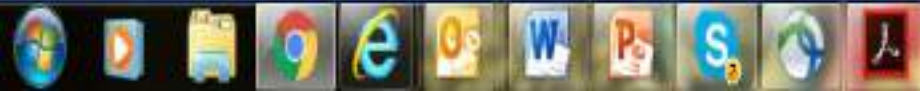
[Sponsors](#)

IPA ...



where professionals
share knowledge

At IPA, we bring the full spectrum of geriatric mental health to light...
...all issues, all disciplines, all around the world!



6:48 PM
9/12/2016

Thank you

www.cheba.unsw.edu.au

www.dementiaresearch.org.au

Thanks to Karolina Kryszinska, Liesbeth Aerts
and Katrin Seeher

h.brodaty@unsw.edu.au