

Neglected Health Issues in HIV: pain, depression, sleeping problems...

Eric Florence



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Outline

- Pain & Hiv
- Depression & Hiv
- Sleeping problems & Hiv
- Why neglected?
- Concluding remarks

Largely inspired by a presentation given by prof. **C. Sabin** (University College London) during the **2021 EACS Summer School**

Empiric observation

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Tally of my consultation on the three items over two weeks

- | | |
|----------------------------------|-----|
| - Invalidating pain problem | 13% |
| - Depressive feeling | 18% |
| - Unsatisfied with sleep quality | 26% |

Neglected issue
maybe....

But not that unfrequent!



Pain & Hiv

2 types of pain

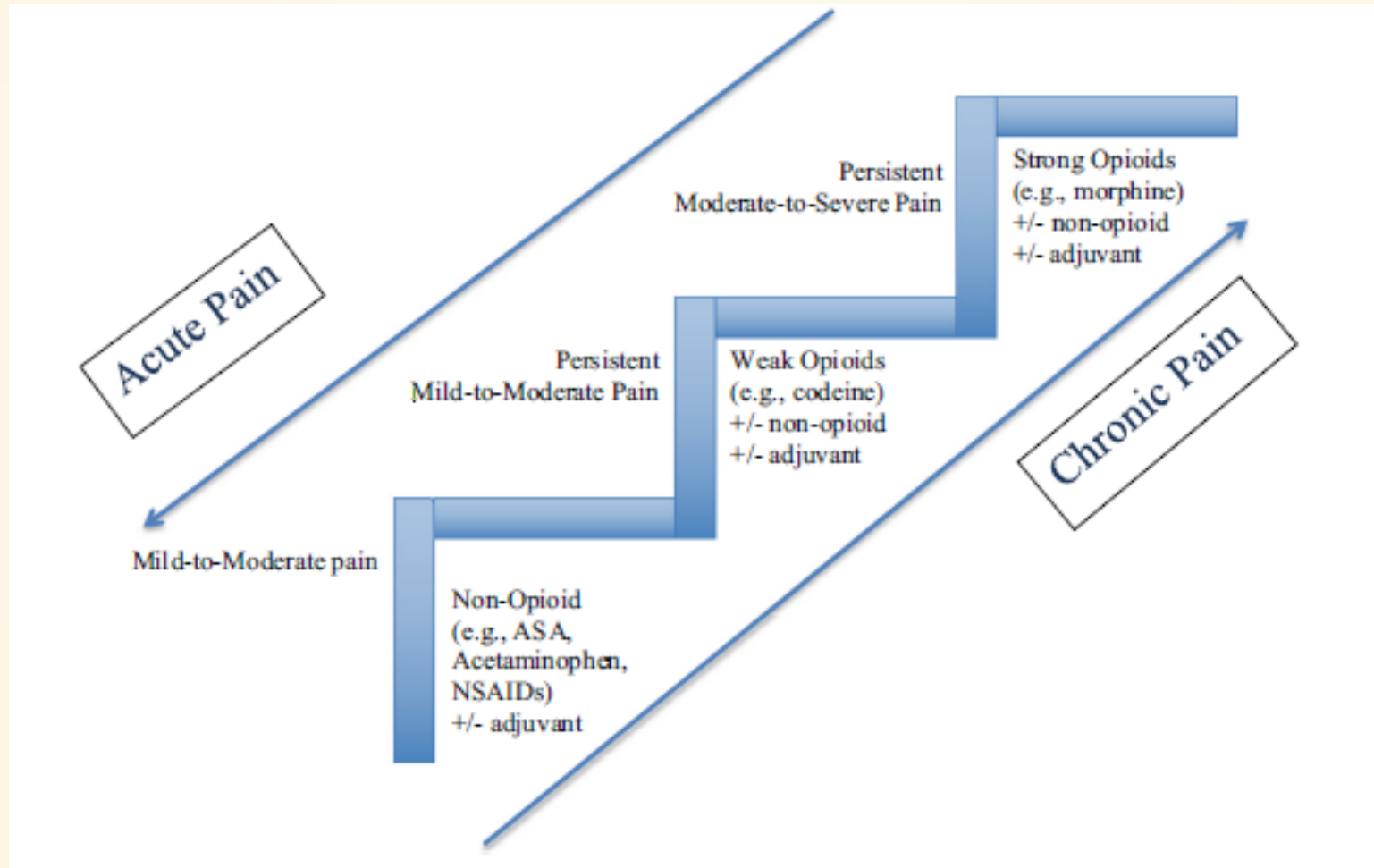
Neuropathic pain

- Drug toxicity
- Hiv itself

Nociceptive pain

- Headache
- Musculo-skeletal disorders
- Rheumatological disorders
- Inflammation/infection (eg abdominal/pelvic)

WHO Pain stepladder (2009)



« Low hanging fruits »

- **Treatment**
 - Pharmacological treatment (cf stepladder)
 - Non –pharmacological treatment
- **Neuropathy** : gabapentine = first line treatment
- **Addiction!** Pain ↔ Substance abuse
- Alcohol consumption
- **Interactions** between ARV & painkillers



Depression & Hiv

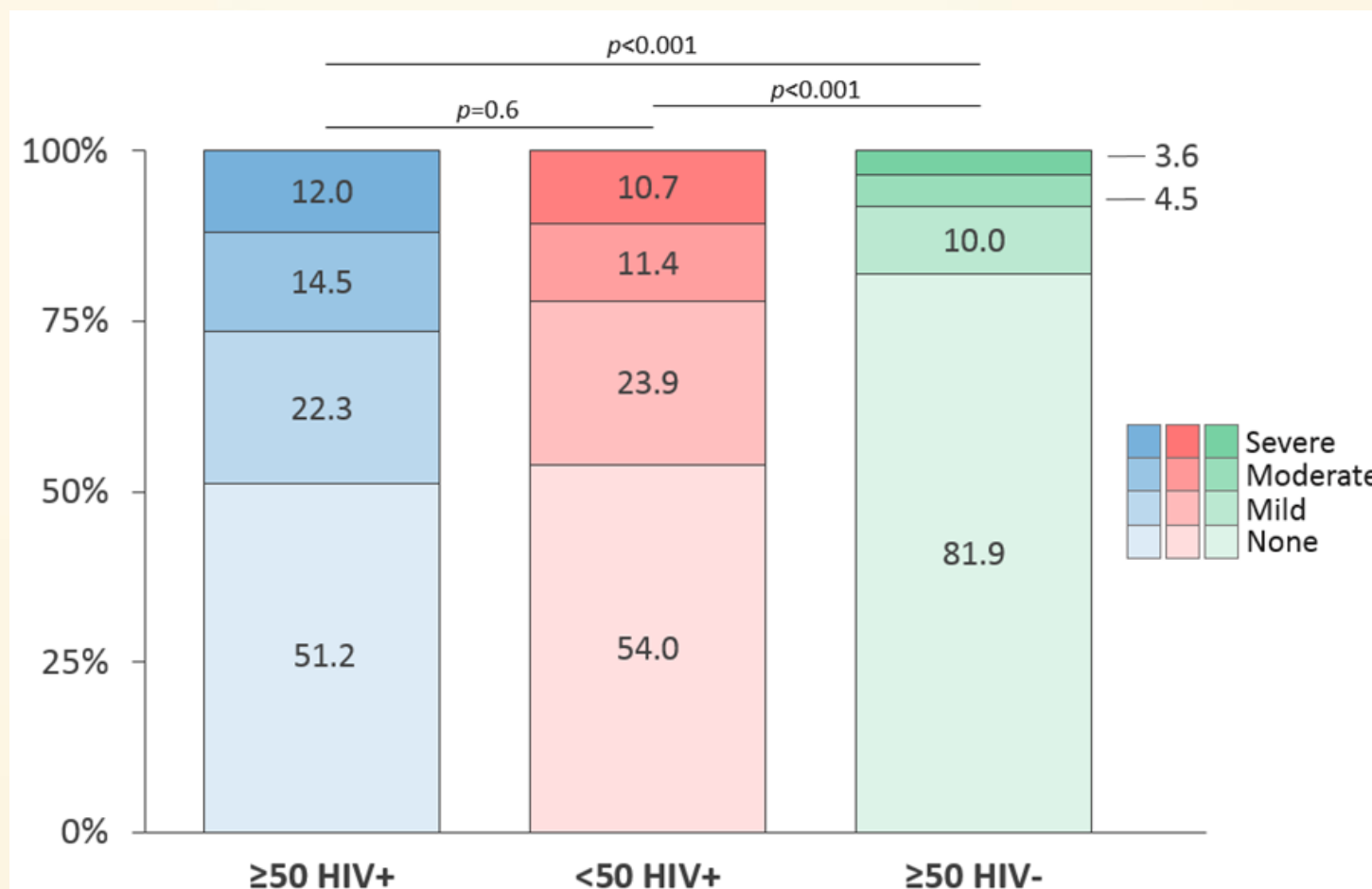
Suicide rate

- Total population in Europe (2019)^a
→ **10,5/100.000/year**
- Hiv+ Population in Europe (periode 2007 -2018)^b
→ **30/100.000/year**

- ITM figures

year	# deaths registered	# suicide	other
2016	14	1	2 OD – 2 Traumas
2017	16	1	/
2018	10	3	1 OD
2019	13	/	/
2020	11	2	/

Prevalence of depressive symptoms – POPPY study



« Low hanging fruits »

- **Hiv ↔ Depression**

- Impact of depression on Hiv acquisition
- Impact of Hiv infection on depression
- Impact of depression on Hiv disease

- **Consider « multi-dimensional » treatment**

- Pharmacological
- Non Pharmacological: Psychotherapy (cognitive based therapy, group therapy etc...)
 Supportive therapy (relaxation, exercise ...)

- **Other tips & tricks**

- Consider Thyroid function test
- Consider switch antiviral drugs
- Other causes of « secondary depression »: dementia, substance abuse, vitamine deficiency

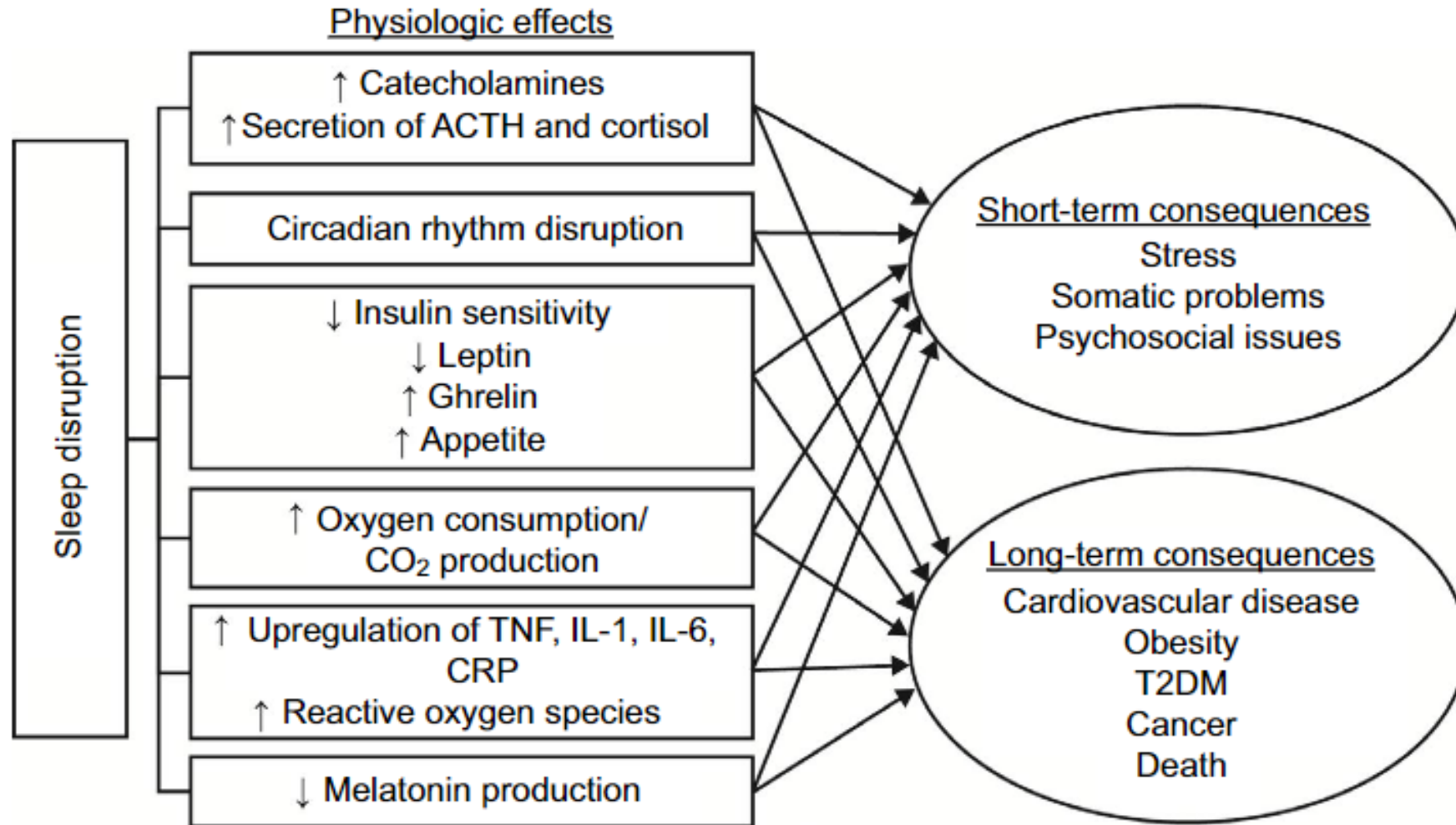


Sleeping problem & Hiv

Very frequent and more prevalent than in general population

ref	Setting	Hiv+	Gen. Pop.
Chaponda M. Int J STD & AIDS 2018	UK	61%	10%
Balthazar M Sleep & Breathing 2020	USA	73%	10-35%
De Francesco D AIDS 2021	UK	22,9%	5,9%

Pathophysiology of sleep deprivation



« Low hanging fruits »

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- Improve **sleep hygiene***
- Exclude OSAS
- Limit pharmacological interventions
- Importance of « wearables »



* nb: « low hanging fruit » does not mean it is easy to implement!

Image: www.freepik.com



Neglected issue?

Why neglected?

- Difficult to quantify

How to measure?

- **Mental health problems**

- Clinical diagnosis by mental health specialist (e.g. psychiatrist, psychologist, counsellor)
- Screening/classification tools (e.g. BDI / EQ 5D / HAM-D / MADRS)
- Self-reported and/or use of treatment

- **Sleep problems**

- Objective assessments (e.g. sleep laboratory, actigraphy/wearables)
- Screening/classification tools (e.g. sleep diaries / ISI / ESS / FOSQ / PSQI....)

- **Pain**

- Self-reported (pain location, acute/chronic, severity and impact)
- Screening/classification tool (Pain-O-meter / MPQ / FLACC / Face Pain Scale)

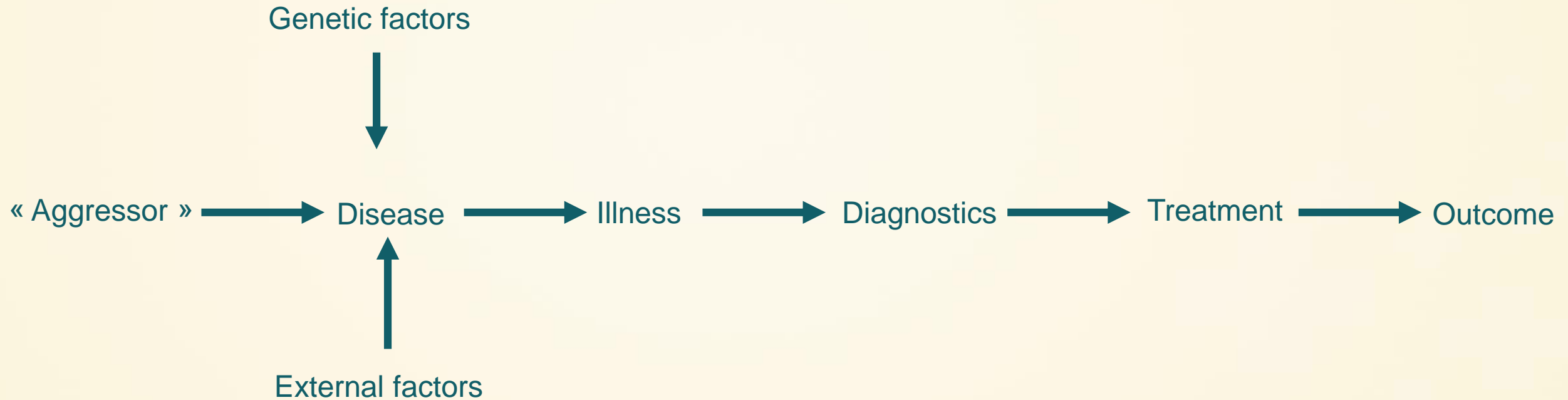
Why forgotten?

- Difficult to quantify
- Few (clinically applicable) research → Few info in guidelines*
- Difficult to treat
- Does not fit within biomedical model

*Suggestions for Eacs guidelines

- Introduce some recommendations on sleeping problems in section « lifestyle interventions »
- Modify section on mental health (more on non-pharmacological interventions)

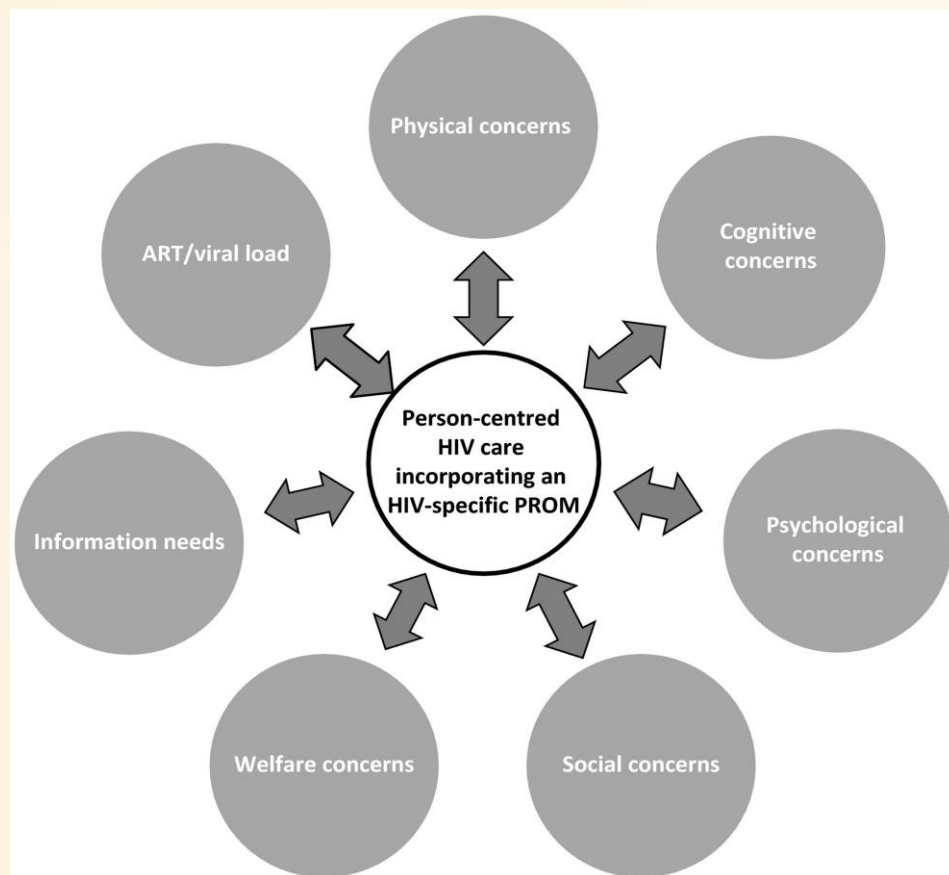
Simple model of disease



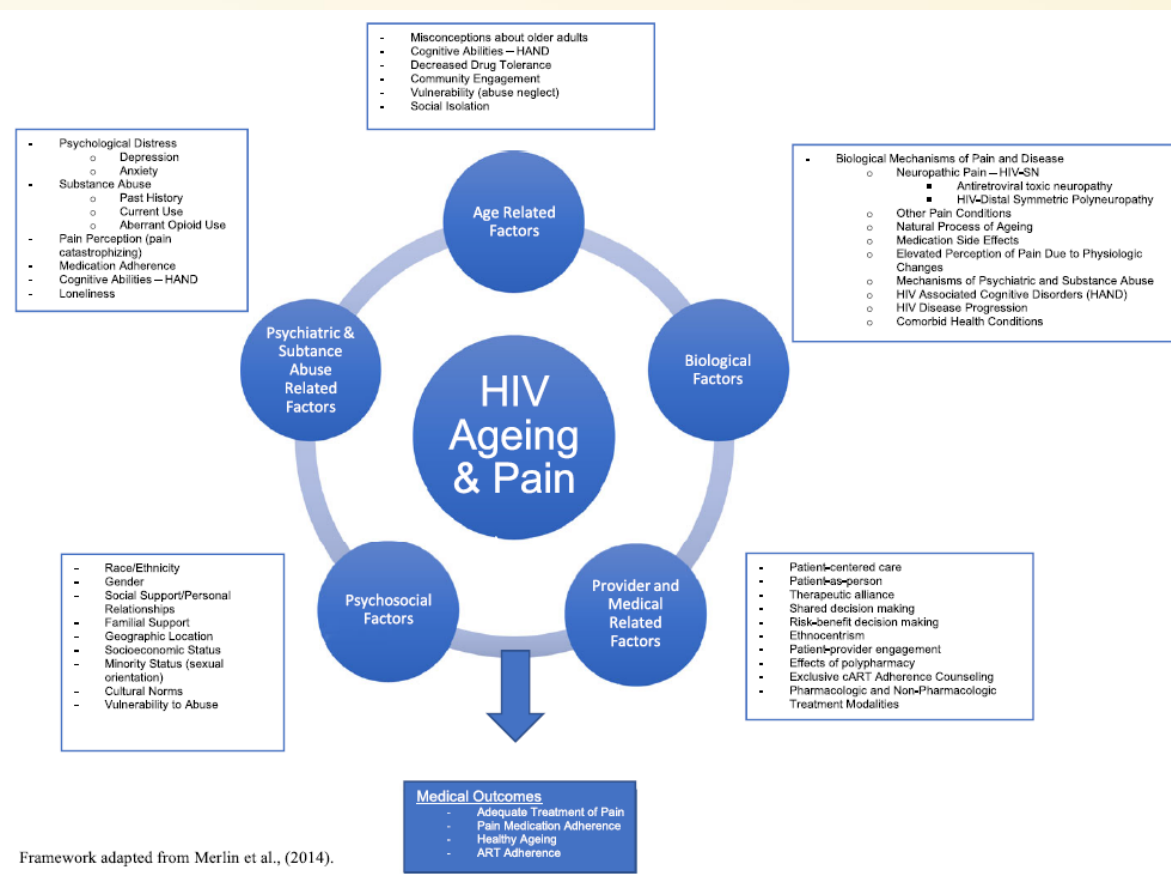
Biopsychosocial model of disease

(Engel GL, Science 1977)

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Bristowe K, HIV Med 2019



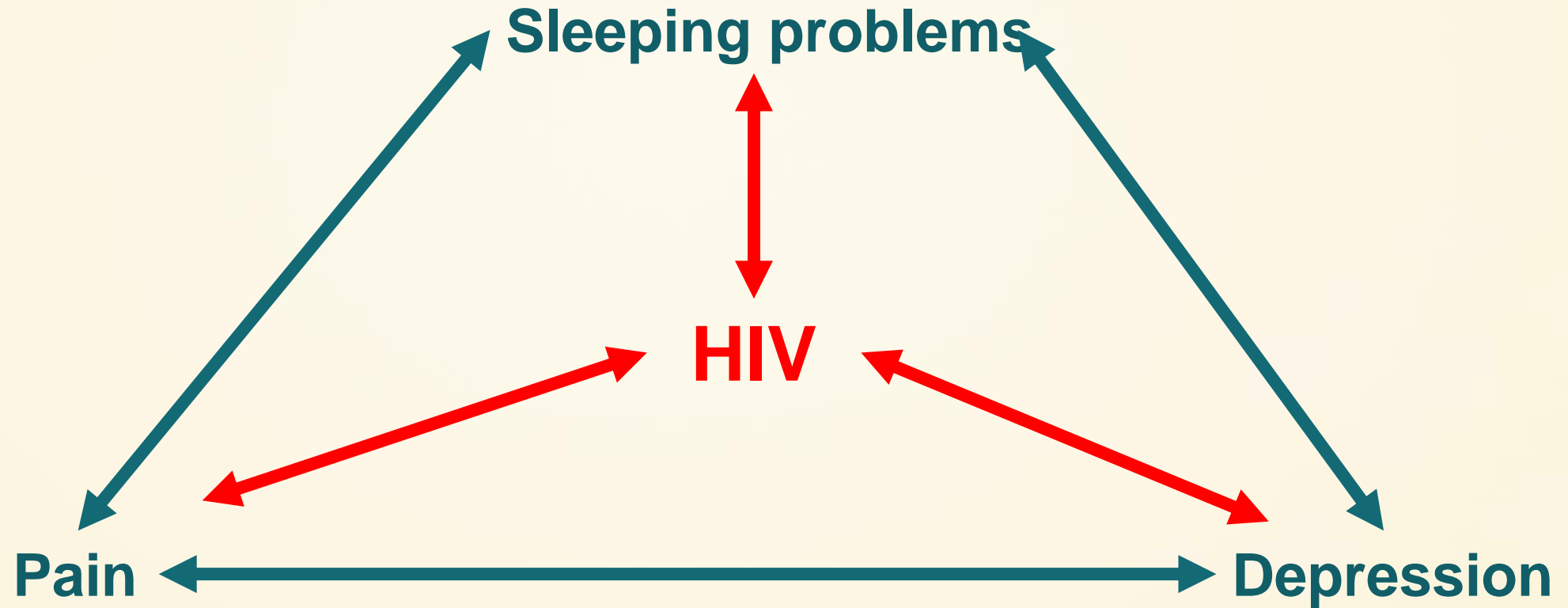
Framework adapted from Merlin et al., (2014).

Miller TR, Ageing Int 2019



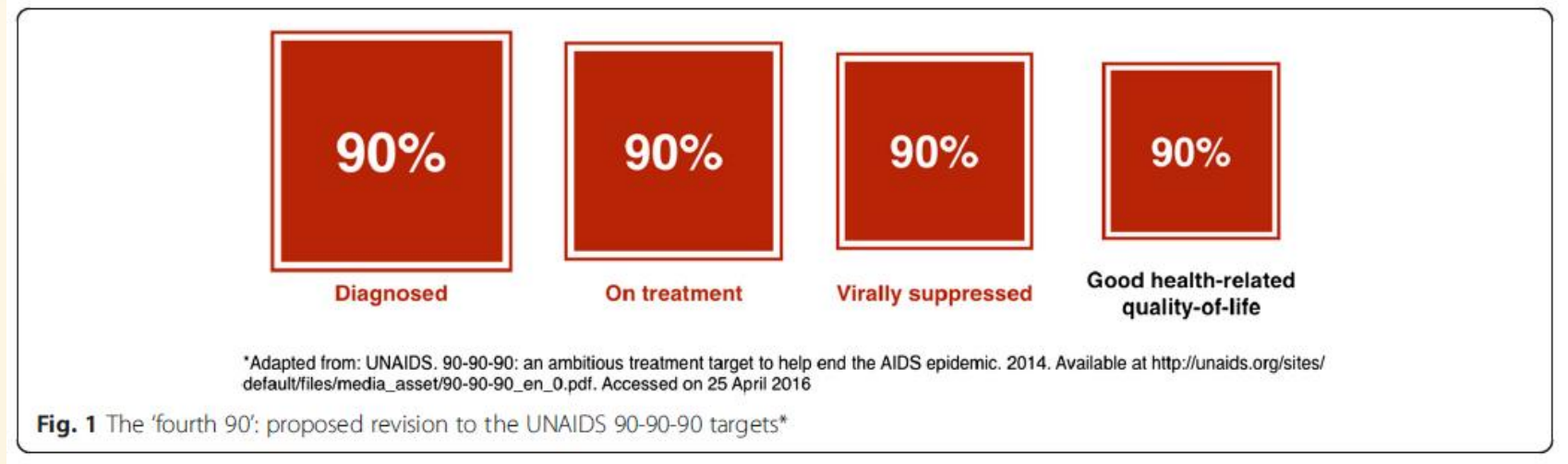
Conclusions

More questions than answers....



More questions than answers....

- Look for the few « low-hanging fruits »
- No magic bullet
 - Do not forget interactions with antiviral drugs
 - Take care of not facilitating abuse/addiction (or polymedication)
- Multidisciplinary approach → involve paramedics from the team
- A call to collect PREM/PROM within our daily practice



Some references

- **Pain**

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- Addis DR, DeBerry JJ, Aggarwal S. Chronic Pain in HIV. *Mol Pain.* 2020
- Bruce RD, Merlin J, Lum PJ, et al. 2017 HIVMA of IDSA Clinical Practice Guideline for the Management of Chronic Pain in Patients Living With HIV. *Clin Infect Dis.* 2017

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- Yousuf A, Mohd Arifin SR, Musa R, et al. Depression and HIV Disease Progression: A Mini-Review. *Clin Pract Epidemiol Ment Health.* 2019
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- De Francesco D, Sabin CA, Winston A, et al. Agreement between self-reported and objective measures of sleep in people with HIV and lifestyle similar HIV-negative individuals. *AIDS.* 2021.

THANK YOU

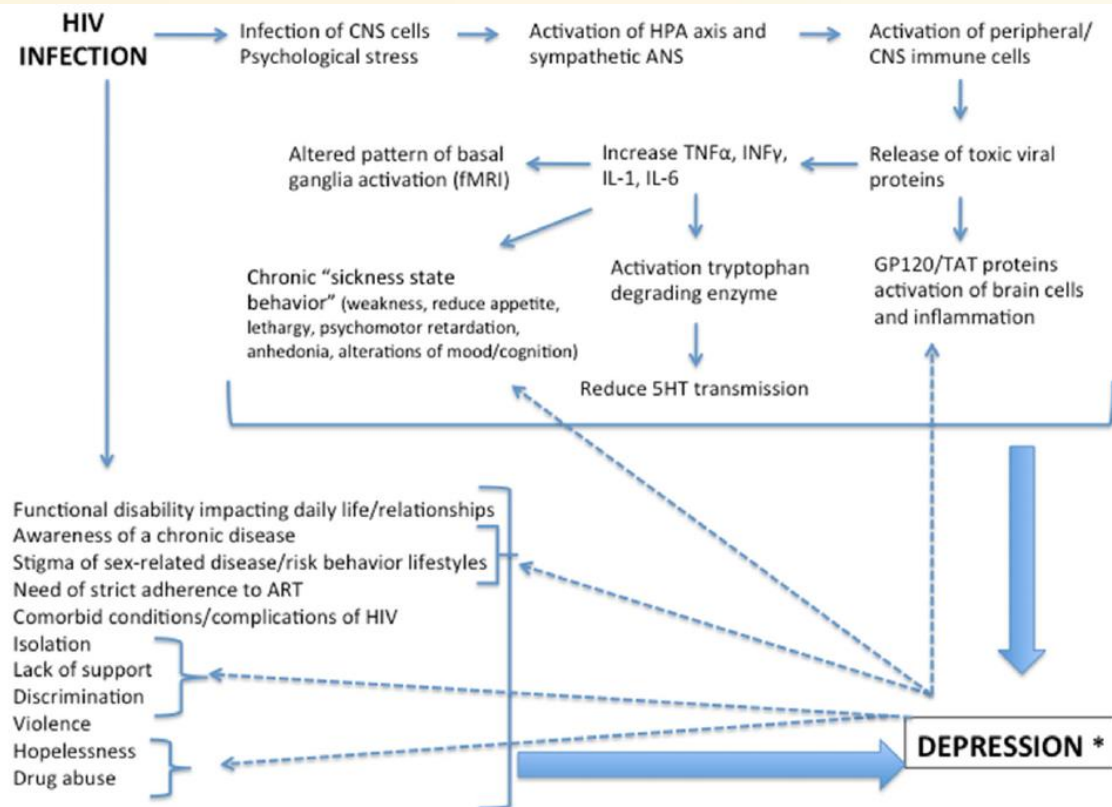


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Contact: eflorence@itg.be

Depression pathways in hiv



Risk factors for HIV in depression

Unprotected sex
Multiple partners
Intravenous drug use

Shared risk factors

Childhood abuse
Cognitive-behavioral factors
Social-relationship
Suicidal ideation
Personality profile (self judgement, poor self-esteem, insecure attachment style, high neuroticism score)

Risk factors for depression in HIV

Female
Older age
Elevated HIV1 RNA levels
Homelessness
Unemployment
Poor income adequacy
Active drug use
Poor self efficacy
Lack of social support