



*To what extent...*

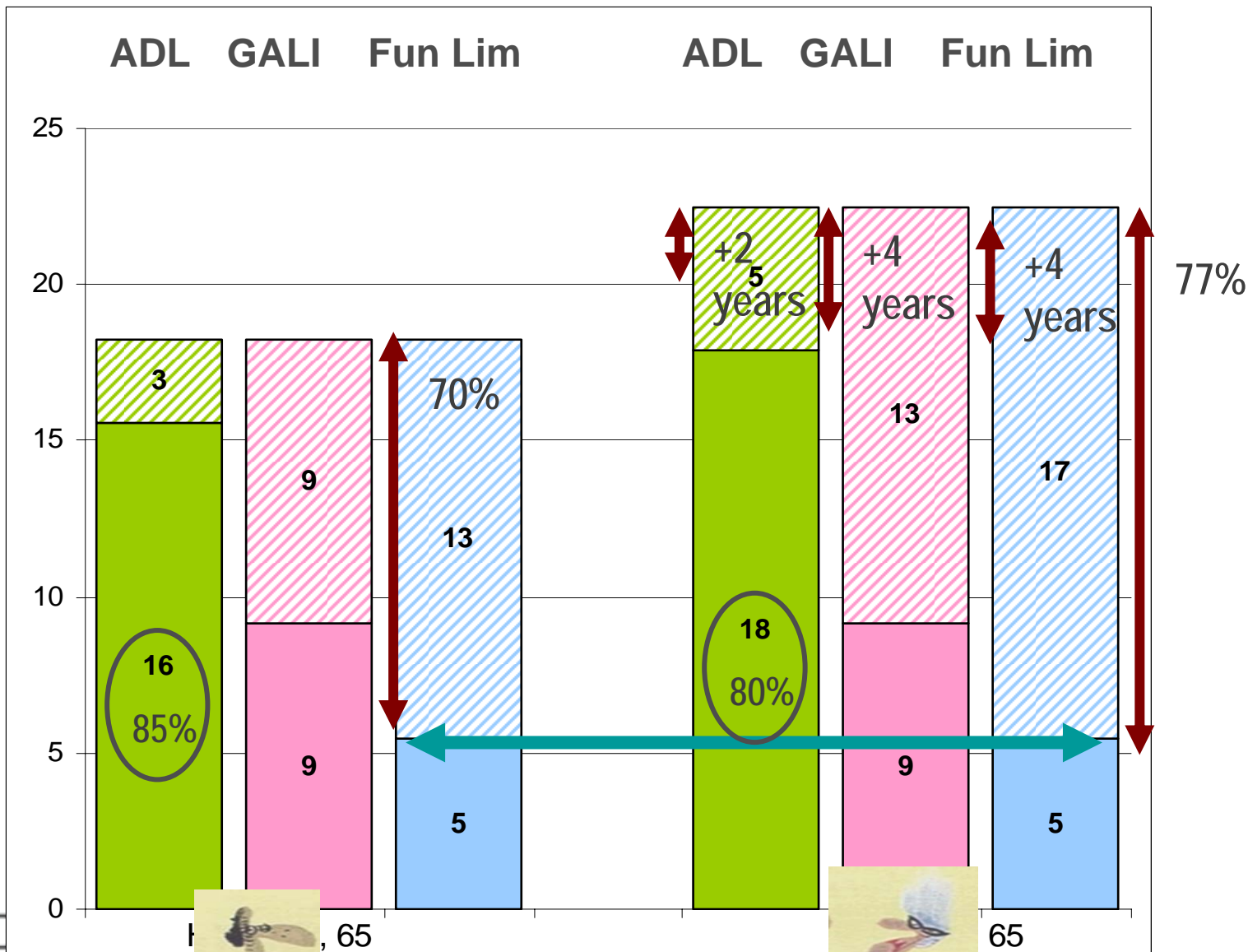
*Work in progress...*

Emmanuelle Cambois  
Audrey Sieurin and Jean-Marie Robine



# Disability free life expectancy at age 65

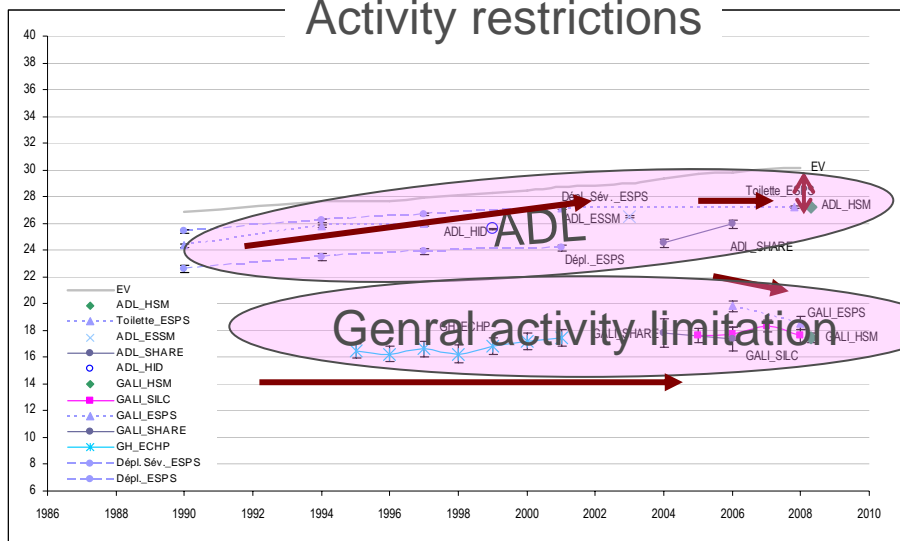
## New figures for France



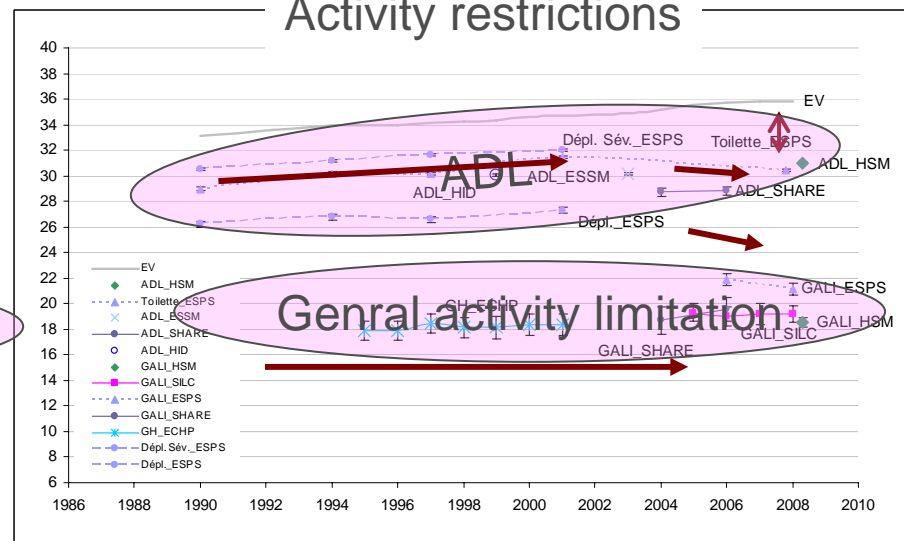
# DFLE: increasing gap in recent years for France



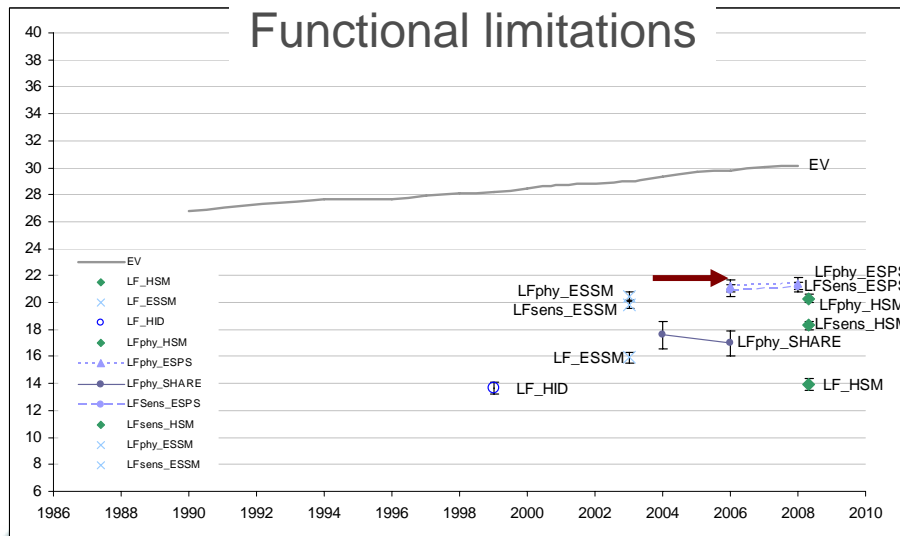
## Activity restrictions



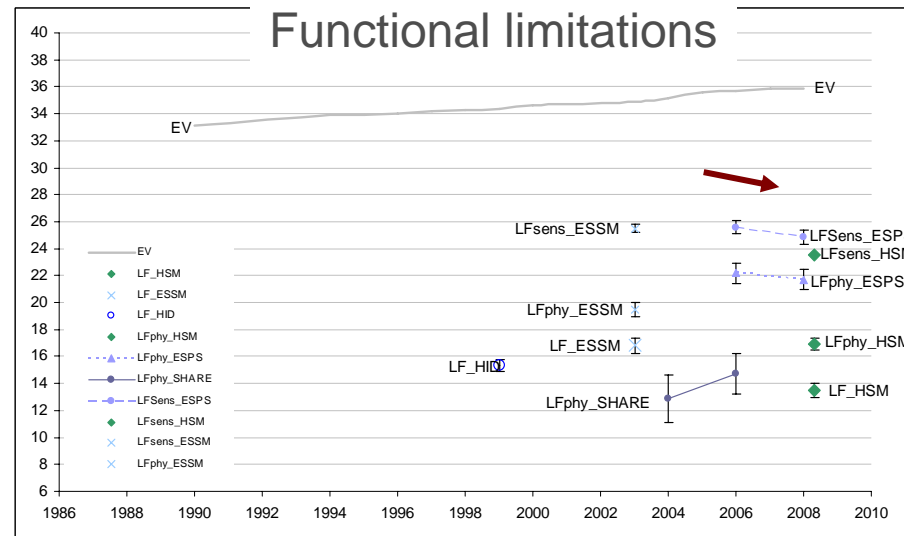
## Activity restrictions



## Functional limitations



## Functional limitations





# *DFLE: increasing gap in recent years for France*

## 1. An increasing/high life expectancy:

- + Same trends after age 65 than in the early 2000.
- Less favorable trends in 50-65 age group: years gained with AR and LF

## 2. Gender pattern in recent years. Compared to men:

- + women gained less LE years but more years free of AR and LF after age 65
- Women lost more years free of disability, especially of LF before age 65

## 3. Changing trends compare to the 1990's and early 2000's in 50-65

- Is it a cohort effect: baby-boomers?
- Better health management / more incline to report?
- Specific disability risks for this cohort (work, life conditions...)?

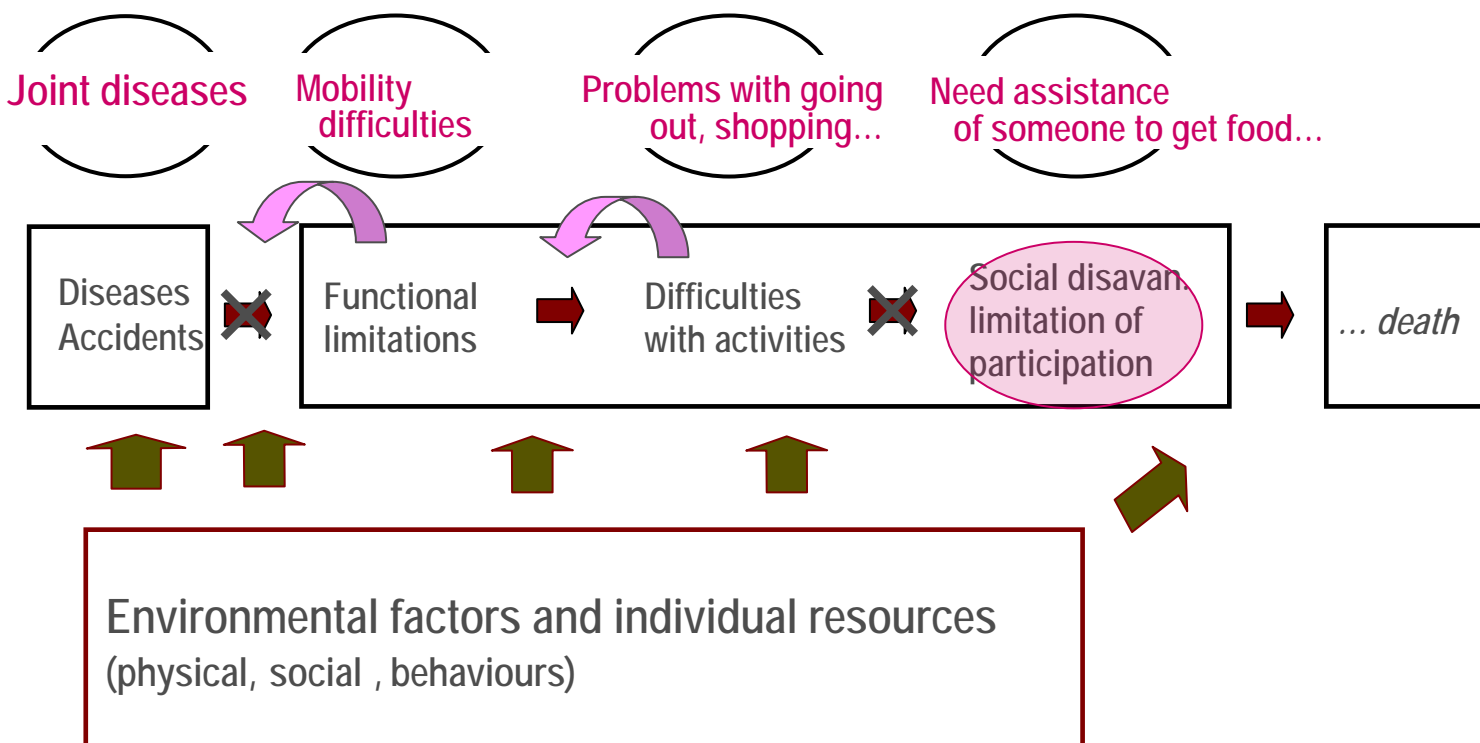
*She lives longer*

*He is healthier... Why?*



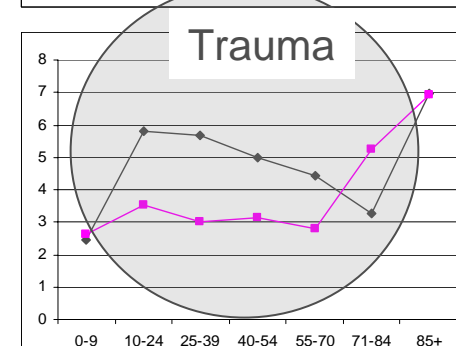
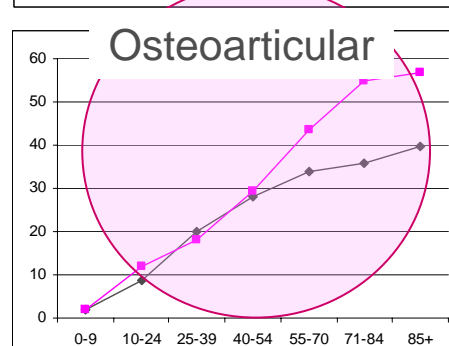
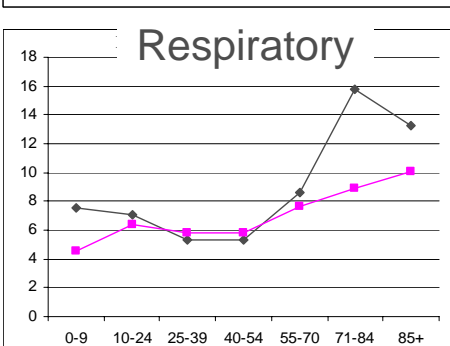
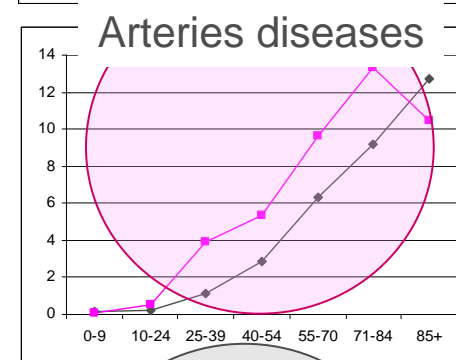
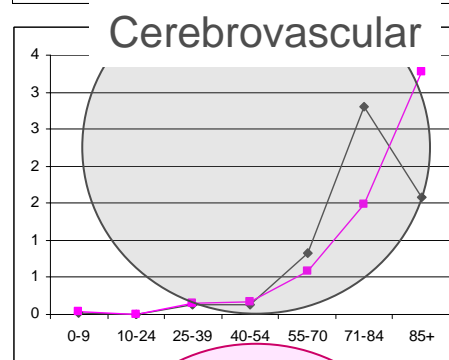
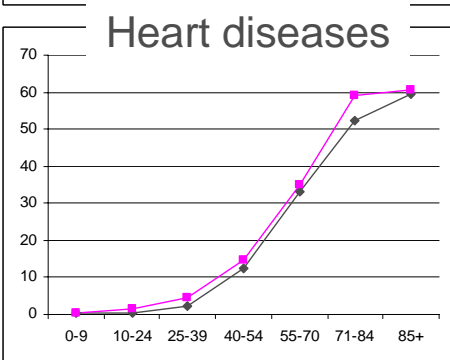
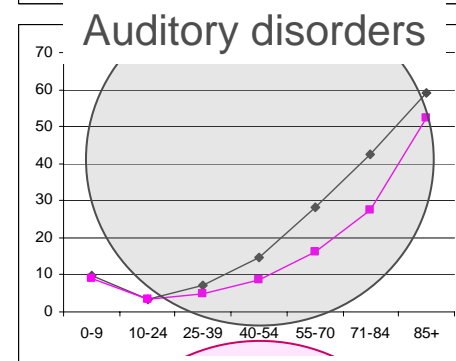
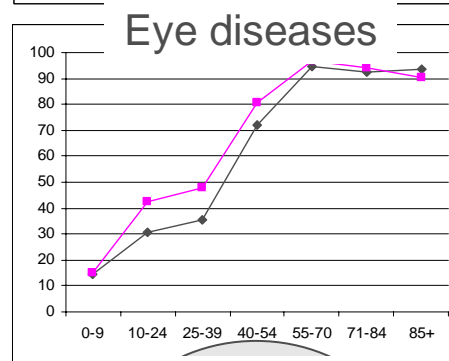
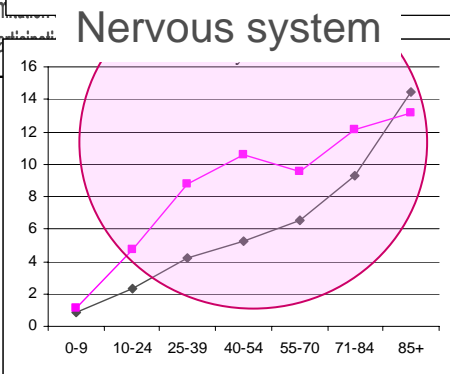
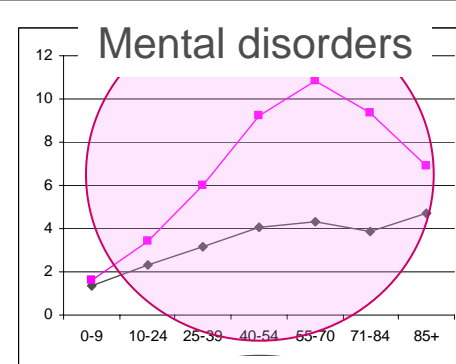
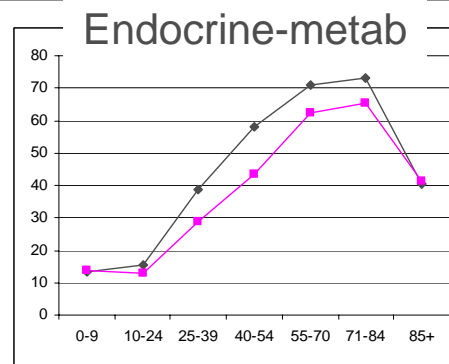
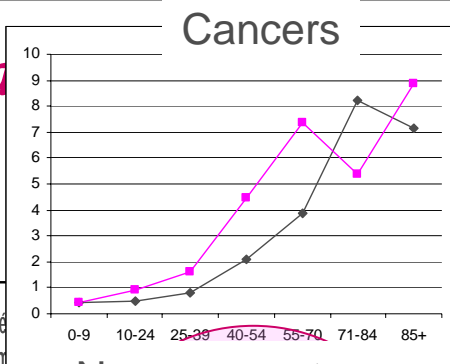
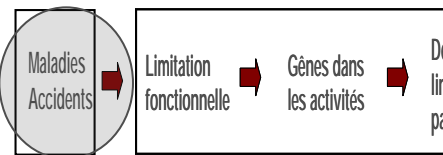
# From diseases to social disadvantage : where are women worst off?

## Disablement process





Rega



*Women report more frequently several diseases*

*... larger disadvantage in disabling diseases*

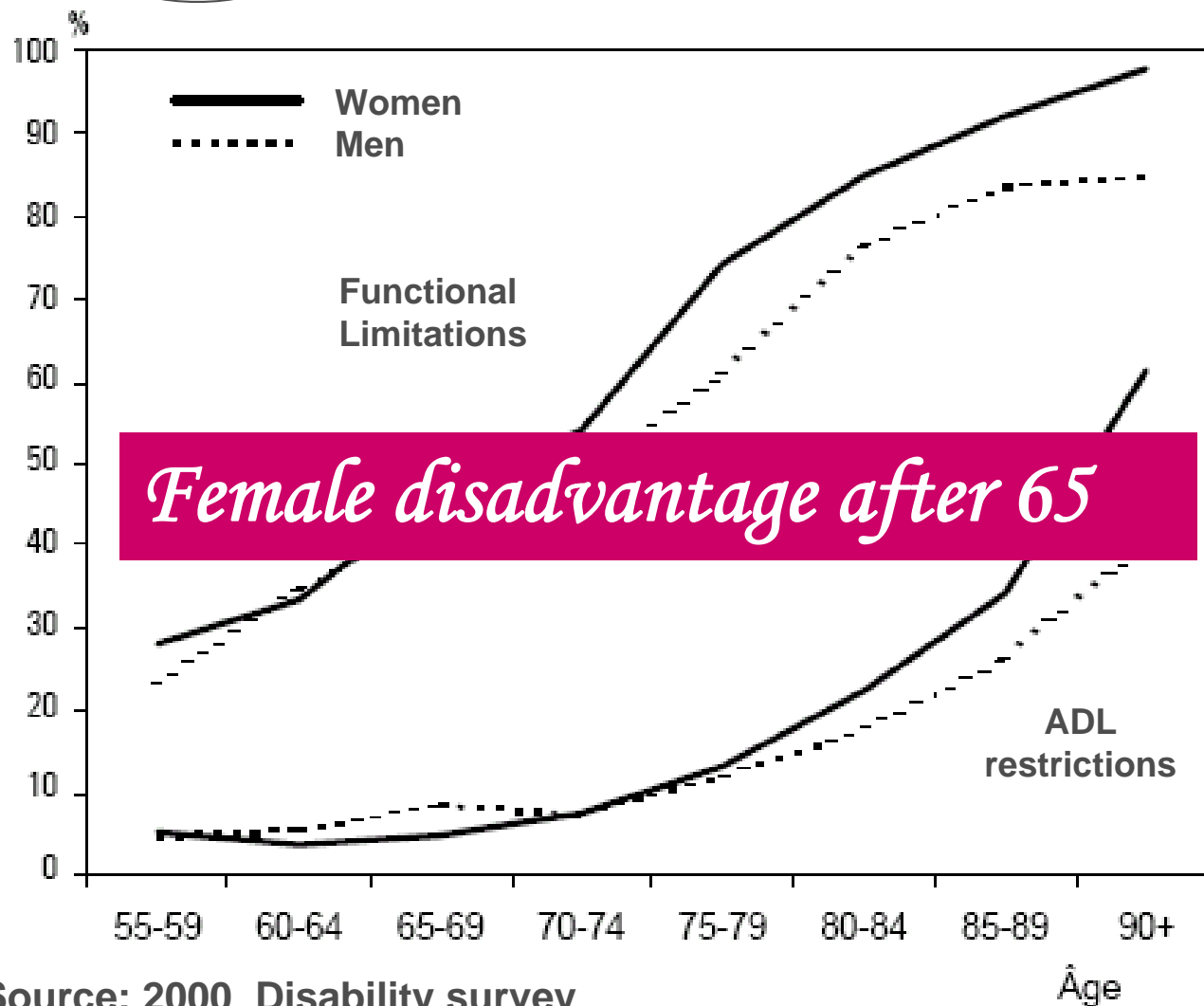
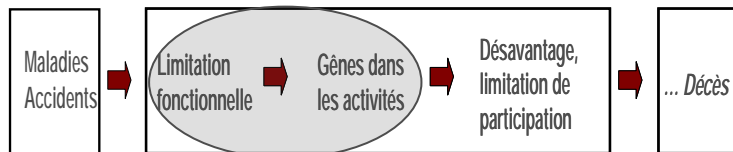
*But this is not as systematic as we could expect*

Source: 2003 Health survey





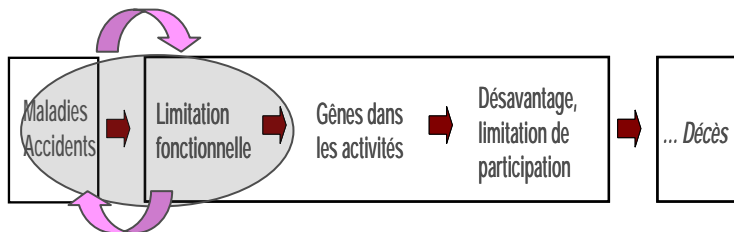
## Regarding disability?



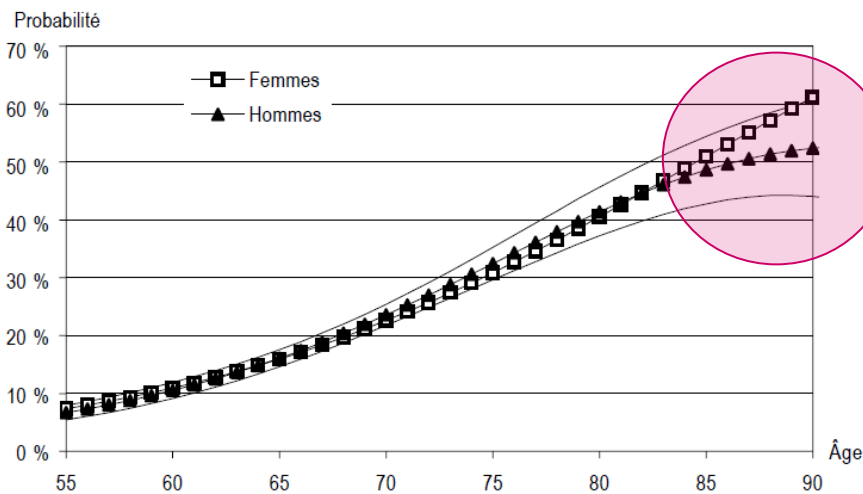
Source: 2000 Disability survey



# Regarding pathways ?



## Incidence of functional limitations after 2 years



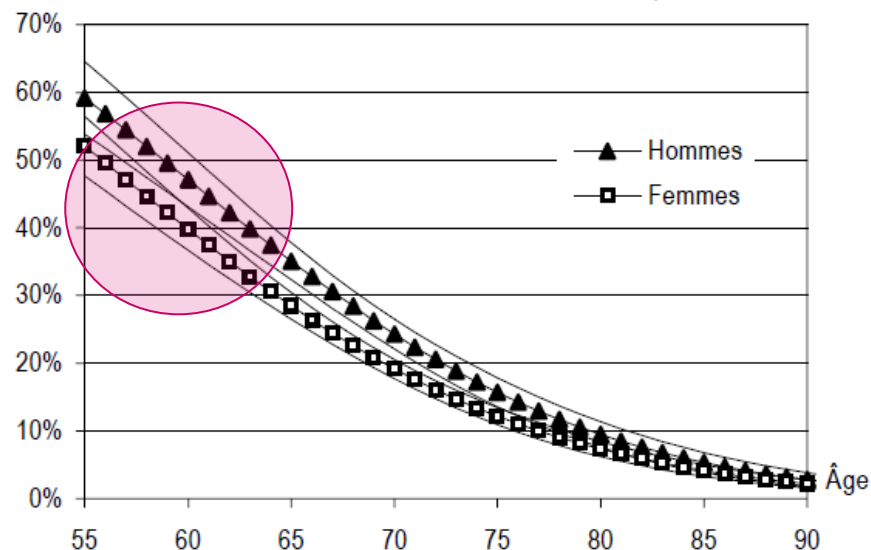
\*Probabilités modélisées à partir du logiciel Imach. L'intervalle de confiance des estimations est représenté pour les hommes seulement.

Lecture : à 55 ans 8 % des hommes sans problème fonctionnel déclarent une limitation fonctionnelle deux ans plus tard.

Champ : hommes et femmes de 55 ans ou plus ré-interrogés à la seconde vague ou décédés

Sources : Enquêtes HID « institutions », 1998 et 2000 et « à domicile » 1999 et 2001

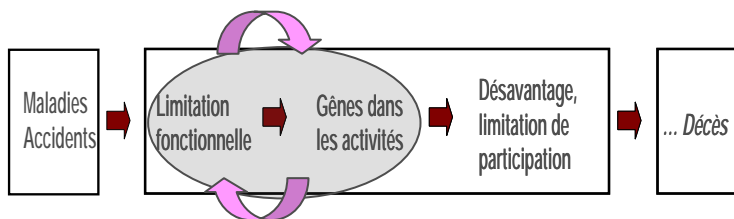
## Probability of recovering from functional limitations after 2 years



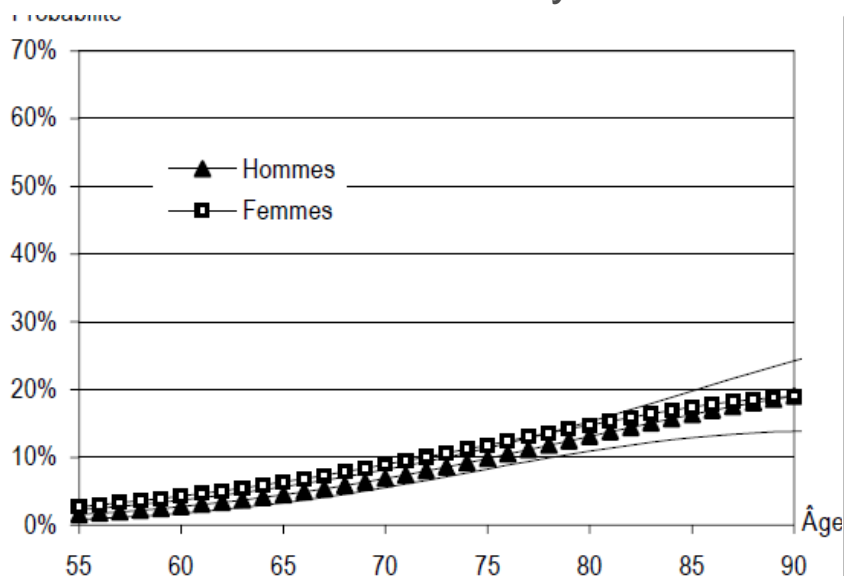




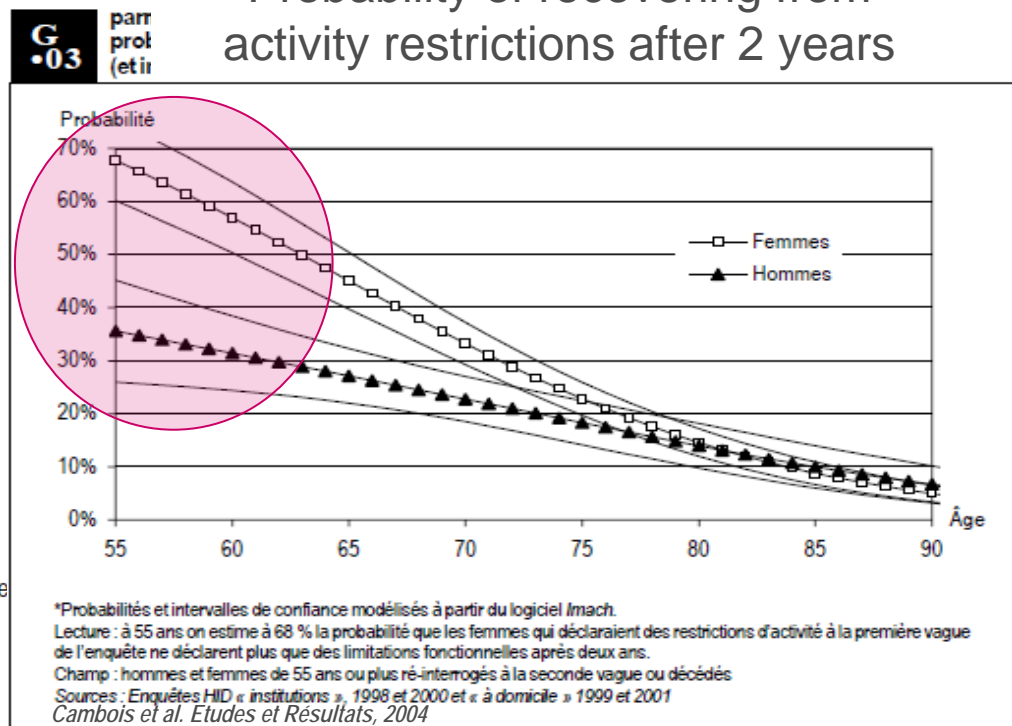
# Regarding pathways ?



## From functional limitations to activity restrictions after 2 years

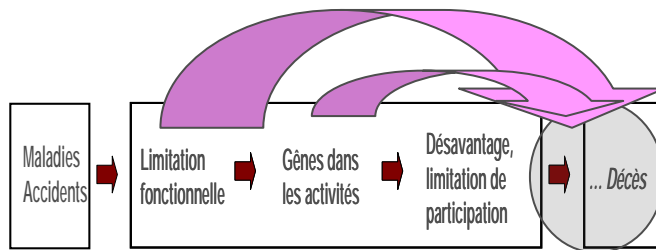


## Probability of recovering from activity restrictions after 2 years







# Regarding pathways ?



## Probability of dying within 2 years

	ajusté sur 			
<b>Age 55-69</b>	<b>ité sur l'âge)</b>			
No disability	1		1	
Functional limitations	1,8	[1,1-2,9]	0,8	[0,4-1,7]
ADL restrictions	5,8	[3,7-9,2]	3,2	[1,7-6,1]
<b>Age 70+</b>	<b>ité sur l'âge)</b>			
No disability	1		1	
Functional limitations	2,5	[1,8-3,5]	2,3	[1,6-3,3]
ADL restrictions	8,8	[6,4-12,1]	7,8	[5,4-11,2]

\*Données brutes (le nombre de décès est trop faible aux âges les plus jeunes pour présenter les estimations modélisées par âge et état de santé fonctionnel).  
 Lecture : Parmi les hommes de 70 ans ou plus présents à la première vague d'enquête, ceux qui avaient une restriction d'activité sévère ont un risque significativement plus fort d'être décédé entre les deux vagues d'interrogation que ceux qui n'avaient déclaré aucun problème fonctionnel (OR=8,8).  
 Champ : hommes et femmes de 55 ans ou plus  
 Sources : Enquêtes HID « institutions », 1998 et 2000 et « à domicile » 1999 et 2001

Cambois et al. Etudes et Résultats, 2004

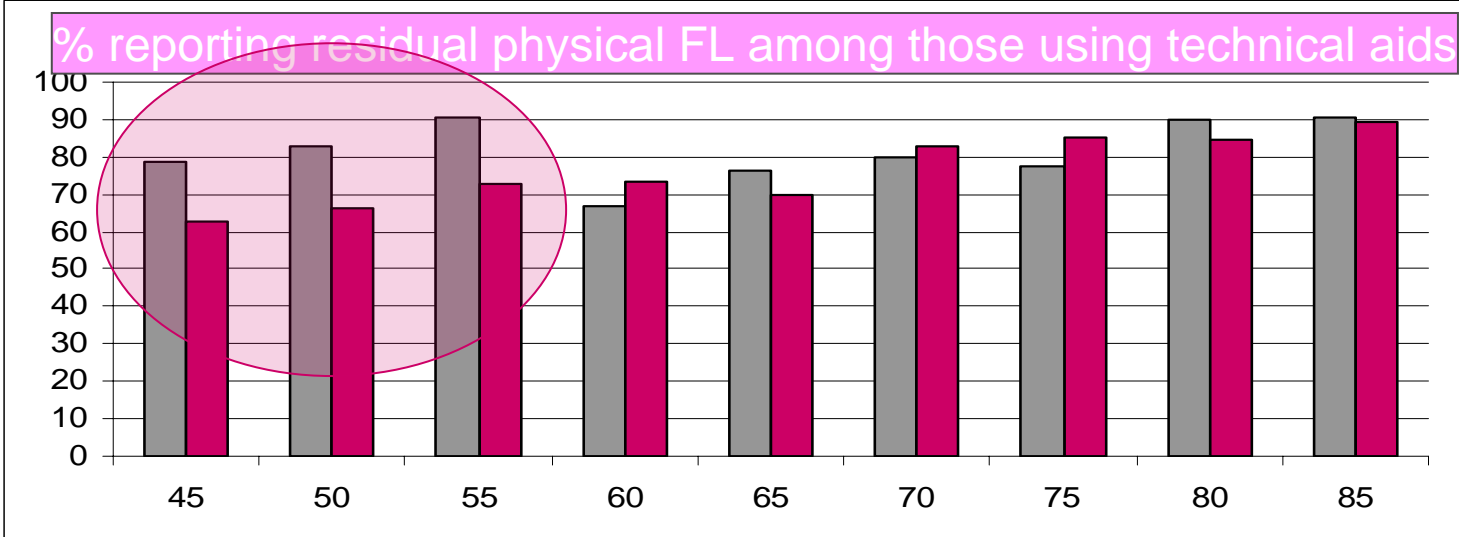
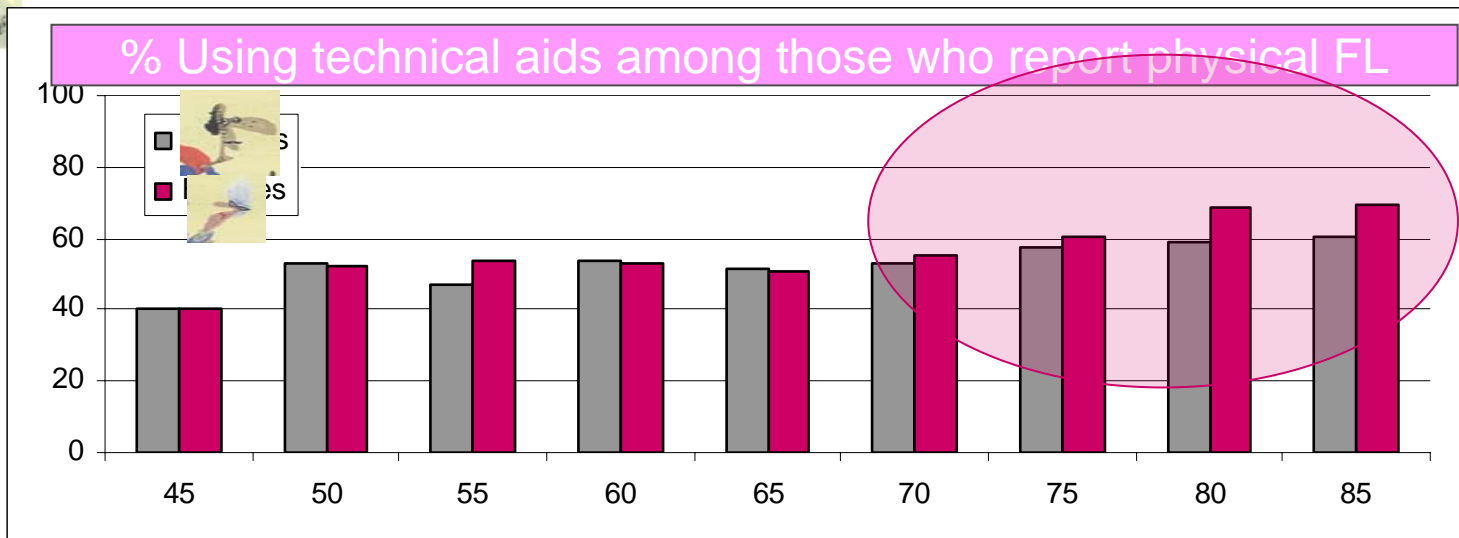


## *Gender differences in the disablement process*

- Women report more frequently disabling diseases than men;
- Women have higher prevalence of functional limitations after 65:
  - ✓ due to the prevalence and type of disease
  - ✓ ↗ risks of incidence after age 65 & ↘ risks of recovering from them
  - ✓ live longer with them (especially before 65)
- Women report more activity restrictions after 65:
  - ✓ due to higher prevalence of functional limitations
  - ✓ = risks of incidence / ↗ risks of recovering from them before age 65
  - ✓ live longer with them



# Do women better cope with their functional limitations?



Source: Enquête santé 2002-03

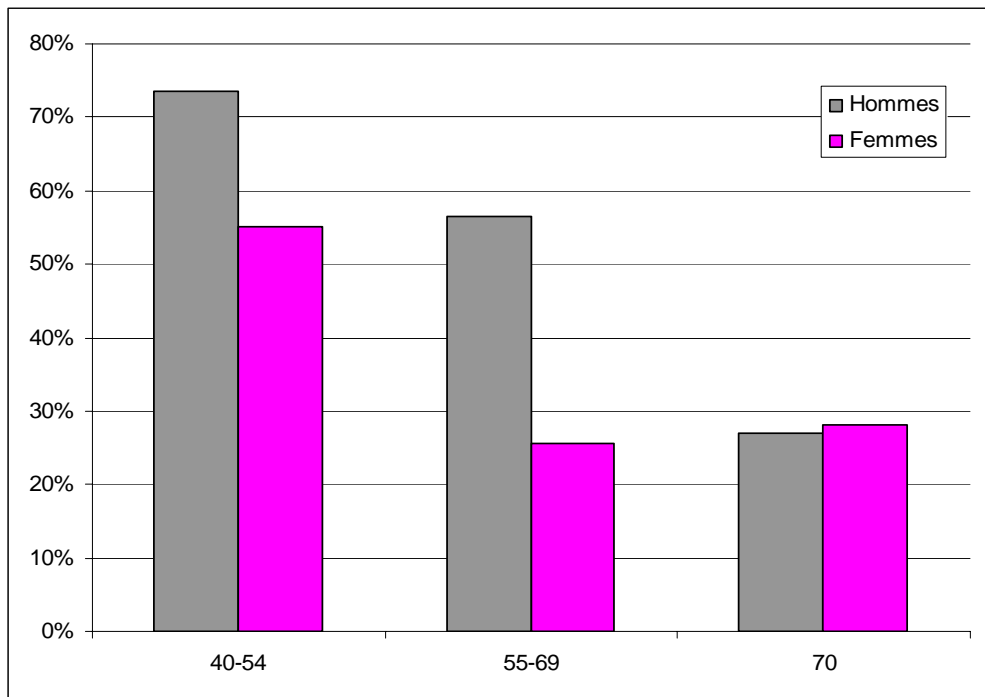
*Women are more incline to use technical aids / better cope at youger ages...*

Source: 2003 Health survey



## *A gender pattern in how disability is treated?*

### Administrative acknowledgement of disability among men and women who report activity restrictions



Source: 2003 Health survey

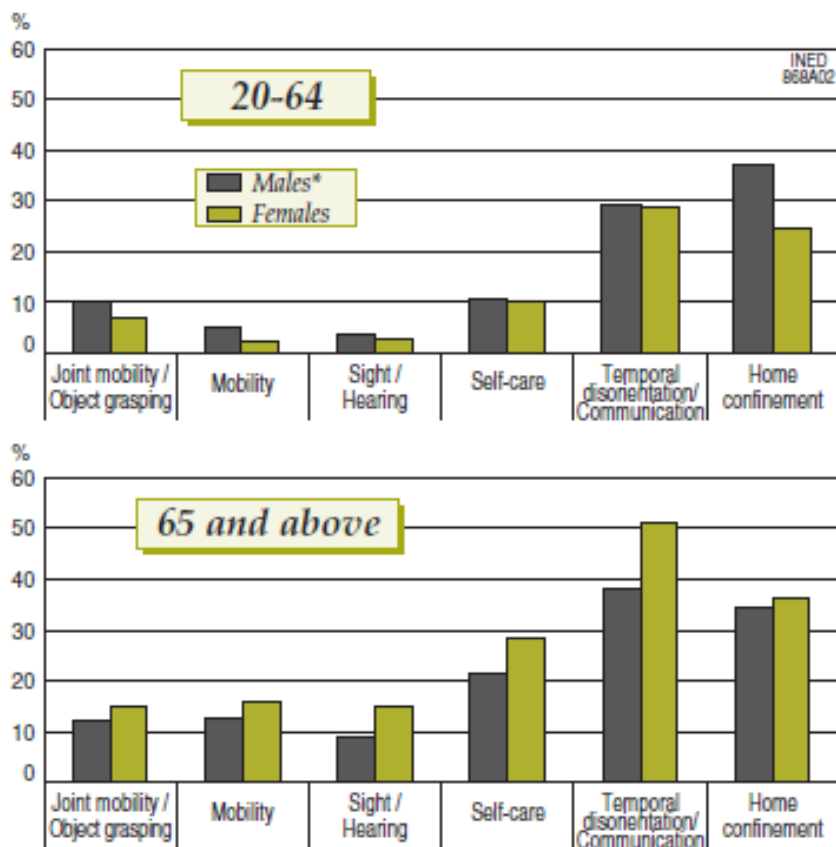
- ✓ A work related acknowledgement at younger ages?
- ✓ An acknowledgement linked to the situation of older ages dependency

*Women with disability are less supported by social schemes at younger ages*



● *A gender pattern in how disability is treated*

Figure 3 - Share of people in institutional care by sex and type of severe difficulty experienced



\* data standardized on the female age structure (see box 2).

- ✓ Women are less in institution before age 65 whatever their functional problem
- ✓ At older age women are more frequently institutionalized

... and opposite differences regarding institutionalisation before and after 65



## *Age specific patterns in sex differences*

- Women report more disabling diseases at all ages
- They better cope before age 65
  - ✓ Men are more inclined to have trauma / female chronic diseases: severity?
  - ✓ Women more systematically use technical aids and inclined to cope with?
  - ✓ Men have a more official socially accepted disability (work related)?
    - ✓ Also apply to women in younger generations?
- Women lose their advantage with age
  - ✓ More disabling diseases and more FL than men / less resources to cope
  - ✓ With FL, similar risks of deterioration and recovery than men
  - ✓ French schemes to provide pensions in case of ADL-dependancy
- After 65, women are more institutionalized
  - ✓ More complex FL than men
  - ✓ Men can more often be helped by their spouse



## Gender or sex differences?

- A better knowledge of own disability... which is less acknowledged:
  - ✓ A socialization of the disability linked to ability to work not to domestic or leisure activities?
  - ✓ A gender specific conditions: trauma *vs* chronic disease and mental disorder?
- Social patterns and age patterns ?
  - ✓ Women are advantaged in their health management at younger age
    - ➔ do they loose their advantage with age / did they loose their advantage in recent years?
  - ✓ Women are the family carer: maternal health, their children health... their parents health
    - ➔ positive effect on their own health management... but deleterious in the long run
    - ➔ Women better cope at younger ages... a more progressive/less visible deterioration ?
- Pists of research
  - ✓ Exploring other types of activity restrictions: less severe, more general
  - ✓ Gender pattern in the link between diseases and disability
  - ✓ Social determinants: cumulated family/work roles ➔ increased risk in the female babyboomers





*Thank you*



# Regarding combination of functional limitations and activity restrictions?

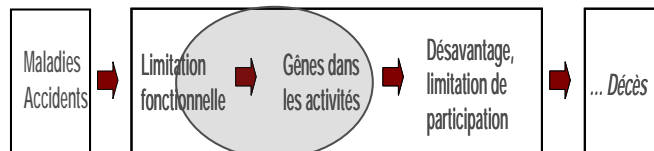


Table IV. Odds Ratio of the risk of experiencing a severe activity restriction according to age, sex, place of residence and functional status (exclusive categories of limitations).

Odds Ratio (severe restriction)	55 – 69		70 and over		55 and over	
None or other (vs physical only)	0.02	[0.01 – 0.04]	0.02	[0.01 – 0.03]	0.02	[0.01 – 0.03]
Sensory only	0.06	[0.02 – 0.20]	0.03	[0.01 – 0.11]	0.04	[0.02 – 0.10]
Orientation only	0.04	[0.01 – 0.28]	0.22	[0.10 – 0.47]	0.15	[0.07 – 0.29]
Sensory + orientation	0.50	[0.06 – 4.33]	0.12	[0.01 – 0.90]	0.18	[0.04 – 0.82]
Physical + sensory	1.54	[1.25 – 1.90]	1.55	[1.38 – 1.73]	1.54	[1.39 – 1.70]
Physical + orientation	2.62	[2.01 – 3.42]	4.41	[3.81 – 5.10]	3.90	[3.43 – 4.42]
Physical + sensory + orientation	4.12	[3.09 – 5.50]	8.10	[7.00 – 9.37]	7.25	[6.37 – 8.24]
One additional year of age	1.01	[0.99 – 1.03]	1.03	[1.03 – 1.04]	1.02	[1.02 – 1.03]
Institutions (vs households)	3.54	[2.96 – 4.23]	3.72	[3.36 – 4.12]	3.77	[3.45 – 4.11]
Women (vs men)	0.75	[0.64 – 0.89]	0.90	[0.81 – 1.00]	0.86	[0.79 – 0.94]

Sources: HID Survey 'institutions', 1998 and 'households' 1999.

*Women with functional limitations are not more at risks of activity restriction than men*



# Regarding functional limitations?

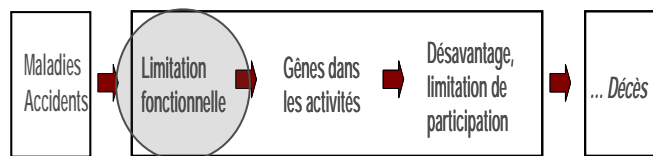
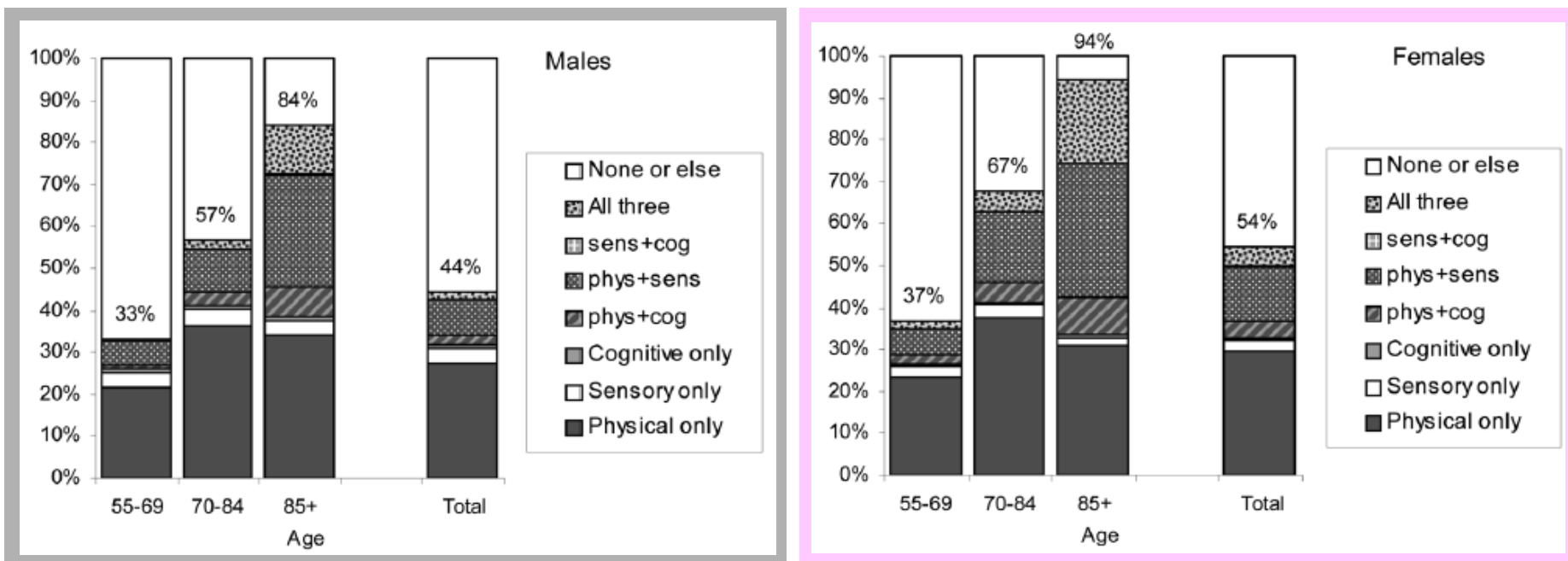


Figure 4. Distribution of the population according to exclusive categories of functional limitations by sex and age groups. Sources: HID Survey 'institutions', 1998 and 'households' 1999.



Cambois et al. *Disability and Rehabilitation*, 2005

*More complex and disabling situations*





# *She lives longer* *He is healthier...*

- Are women sicker than men?
- Are they more aware / informed about their health so they report better?
- Women better manage their own health and live better and longer with conditions?
- Is there gender differences in health: social factors and management of diseases/disability?