

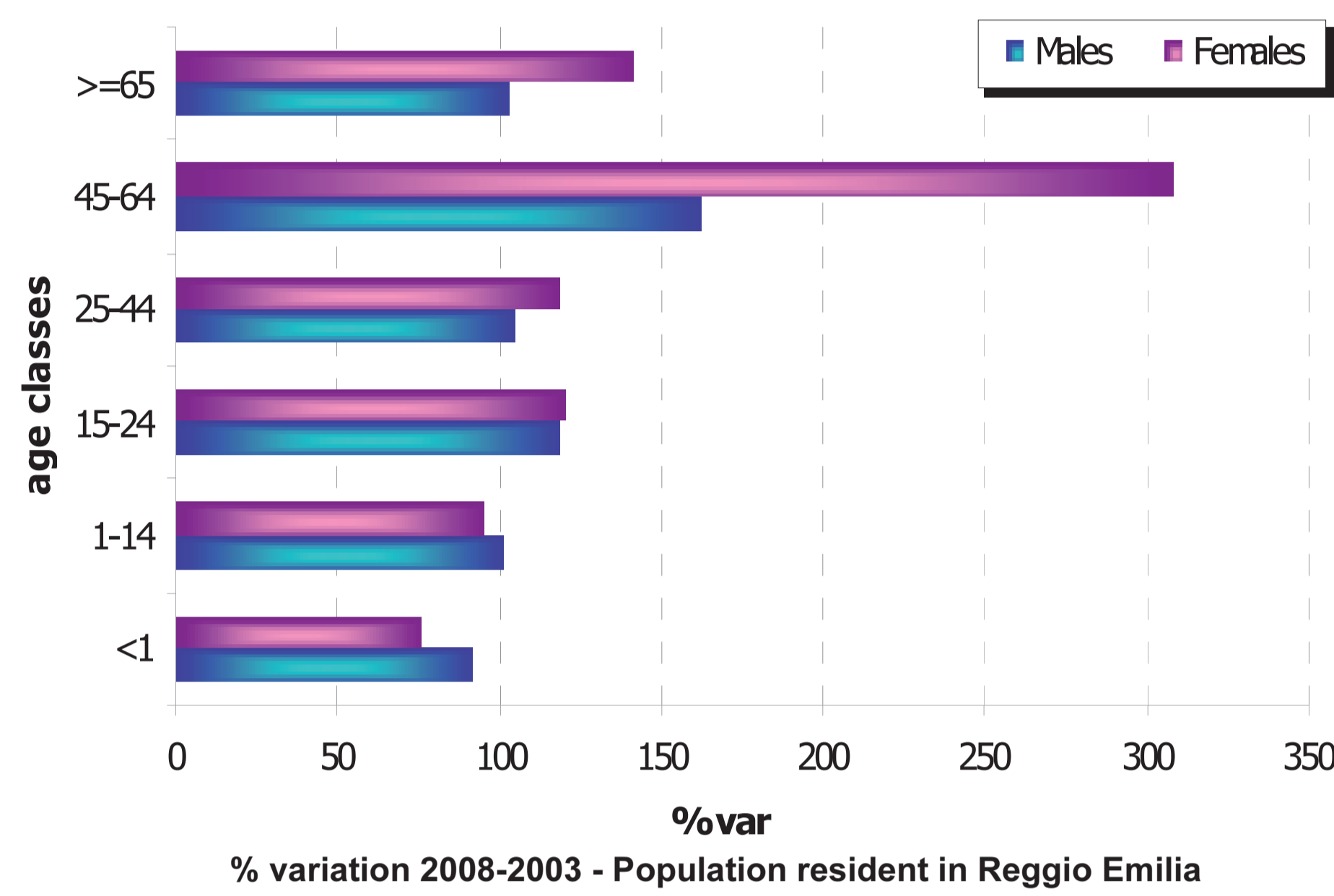
Hospital Admissions among Immigrants in the Province of Reggio Emilia: A Way of Monitoring the Expected Epidemiological Transition

Pacelli B., Ventura C., Candela S.

Unit of Epidemiology, Public Health Department, Local Health Unit of Reggio Emilia, Italy

RATIONALE

In the last few years the number of immigrants in Italy has rapidly risen. During the last 10 years the Province of Reggio Emilia (Northern Italy) has experienced a sharp increase in the immigrant population and one of the highest rates in Italy (10% vs 6% in 2008). Moreover, in the last few years, especially the 45-64 age-class has had a significant growth.



Immigrants, able to plan a migration project, are probably healthy ("Healthy Migrant" effect), as pointed out in the first epidemiological report referring to 2003-2004 period.

However, some years after their arrival, some changes due to both ageing and the tendency to develop host population risk factors are expected (Epidemiological Transition).

OBJECTIVE

On the basis of Hospital Discharge data, the main aim was to define if the epidemiological transition had already started, especially as concerning chronic diseases.

MATERIALS AND METHODS

A descriptive observational study about the immigrant population health profile was carried out. Hospital Discharge Register data from 2005 to 2007 (N=272,907), which cover all public and private hospitals in Reggio Emilia, were analysed according to age, gender, citizenship and causes of admission. The comparison of hospitalization of immigrants vs italians was evaluated by means of SHR (Standardised Hospitalization Ratio) and its 95% CI, referring to 0-64 age-group. RR (Rate Ratio) was calculated in case of comparison among 1 years old child. In order to control different age-specific patterns, age-classes stratified SHR were performed. Immigrants were identified as people with a foreign nationality with exclusion of the More Developed Country (MDC).

RESULTS

Overall hospitalization among immigrants is lower for men (SHR =0.73; 95%CI=0.71-0.75) and higher for women (SHR =1.19; 95%CI=1.17-1.21) than italians. Analysing the main nationalities present in the area, essentially the same results were found.

0 to 64 Years	MALES			FEMALES		
	N.	SHR	95% CI	N.	SHR	95% CI
ITALIANS	62.305	1	- -	80.758	1	- -
IMMIGRANTS	5.107	0,73	0,71 0,75	11.370	1,19	1,17 1,21
MOROCCO	1066	0,77	0,72 0,82	1.943	1,34	1,28 1,40
ALBANIA	632	0,71	0,66 0,77	1076	1,18	1,11 1,25
CINA	256	0,44	0,39 0,50	824	1,08	1,01 1,16
INDIA	505	0,74	0,67 0,80	932	1,27	1,19 1,36
PAKISTAN	468	0,84	0,76 0,92	601	1,52	1,40 1,64
GHANA	304	0,88	0,78 0,98	569	1,50	1,38 1,62
NIGERIA	149	1,13	0,96 1,33	494	1,85	1,69 2,02
ROMANIA	170	0,62	0,53 0,72	513	0,92	0,84 1,00
UKRAINE-MOLDAVIA	128	0,62	0,51 0,73	940	0,72	0,67 0,76

Number of hospitalizations (N), Standardised Hospitalization Ratio (SHR) and 95% Confidence Interval (CI), by gender and nationality – Period 2005-2007



Overall and cause-specific Standardised Hospitalization Ratio (SHR) and 95% Confidence Interval (CI)– Period 2005-2007

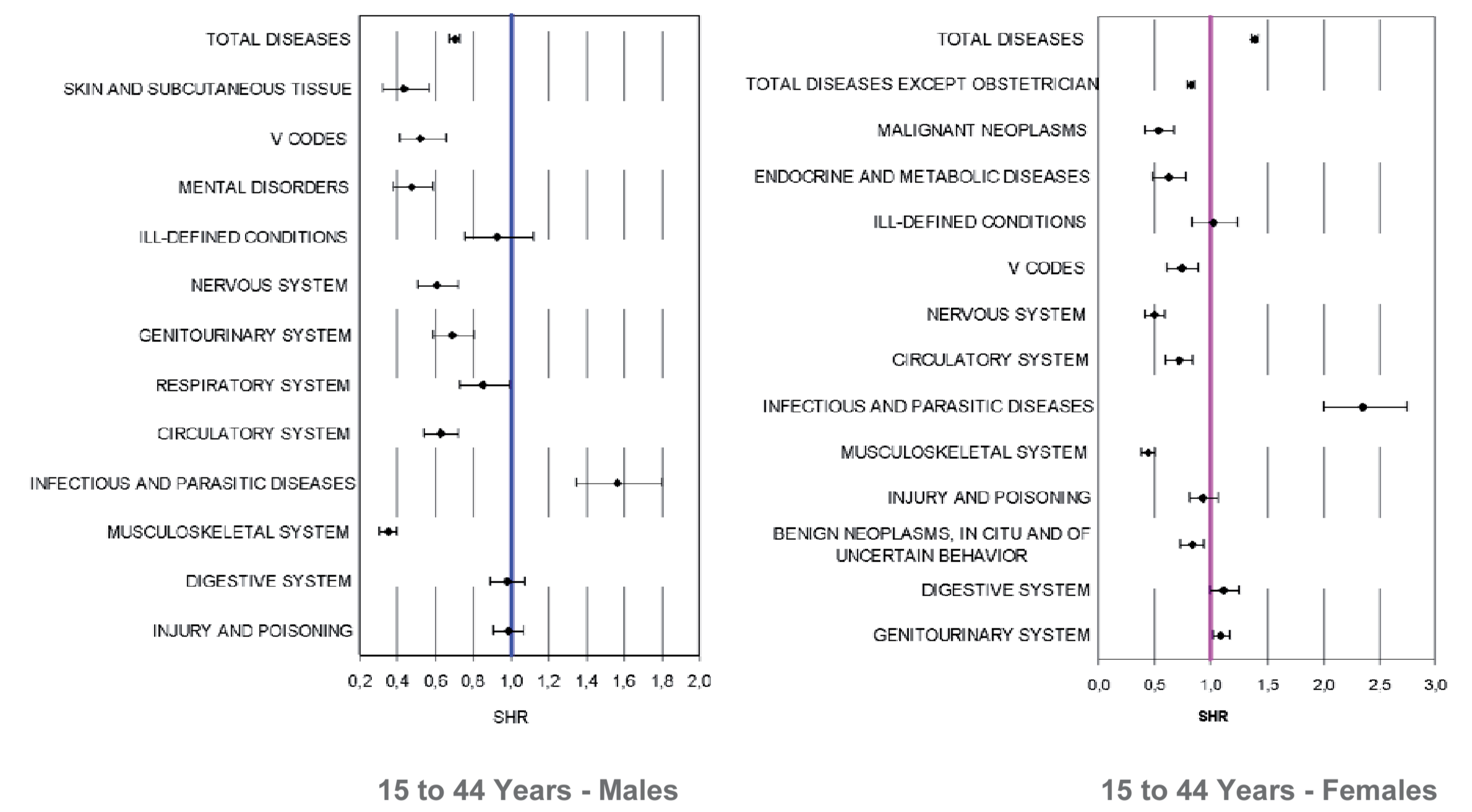
First years of life

Among immigrants, congenital anomalies are more frequent during the first month of life (RR=1.37 95% CI: 1.03-1.82), whereas endocrine disorders occur most frequently over the first month (RR=1.49 95% CI: 1.04-2.14).

Young people and adults

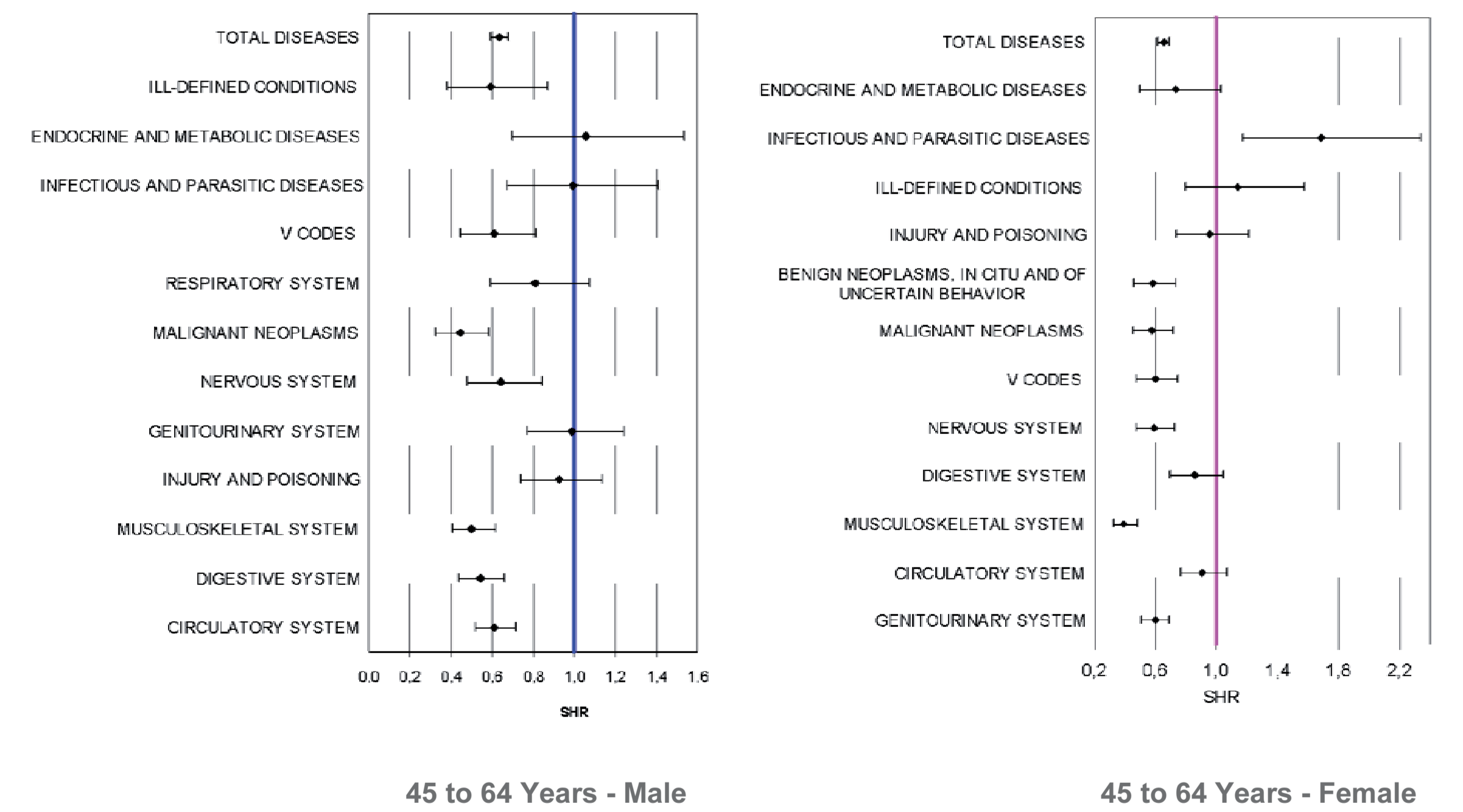
Infectious diseases represent, both for men and women, a higher admission cause among immigrants, especially in 1-14 and 15-44 age classes.

Among 15-44 years old women, except for pregnancy-related admissions, SHR decreases from 1.40 (95%CI=1.37-1.42) to 0.82 (95%CI=0.79-0.85).



15 to 44 Years - Males

15 to 44 Years - Females



45 to 64 Years - Male

45 to 64 Years - Female

Overall and cause-specific Standardised Hospitalization Ratio (SHR) and 95% Confidence Interval (CI)– Period 2005-2007

CONCLUSIONS

Compared to the first immigrants epidemiological data referring to 2003-2004 period, the results are substantially not changed.

The "Healthy Migrant" effect still persists, with no evidence of an epidemiological transition process beginning.

The monitoring of immigrants' health status is important to planning the actions necessary to support their demand of health services, both for chronic and acute diseases.