

Antimicrobial resistance data of  
*Helicobacter pylori* from the Belgian  
National Reference Center in 2015

# Evolution of primary antimicrobial resistance rates of *H. pylori* (2013-2015)

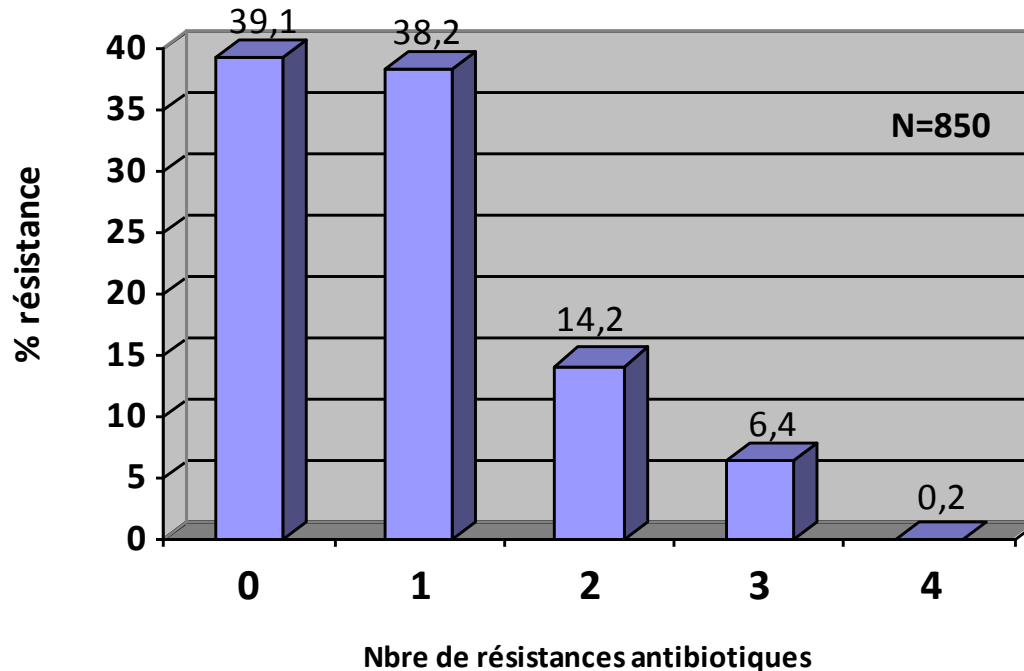
ANTIBIOTIQUES	2013 N = 606 % RESISTANCE	2014 N = 741 % RESISTANCE	2015 N = 850 % RESISTANCE
Amoxicilline	1,3	1,2	1,2
Clarithromycine	27,6	29,5	26,5
Metronidazole	36,3	40,1	36,5
Levofloxacin	28,5	29,1	26,5
Tetracycline	0.5	0.1	0

Results are following exclusion of duplicates (one isolate per patient) and of *H. pylori* isolates from gastric biopsies obtained from patients known as previously exposed to a anti-*H. pylori* eradication regimen ('secondary resistances'; when information about previous treatment is not mentioned, only the first bacterial isolate is retained).

Biopsies sent for *H. pylori* culture to the National Reference center (NCR) are in majority obtained from eleven centers (7 in Wallonia, 3 in Flanders, 1 in Brussels). This restricted diversity in the origin of the isolates limits the significance of the data which may not be representative at a country level.

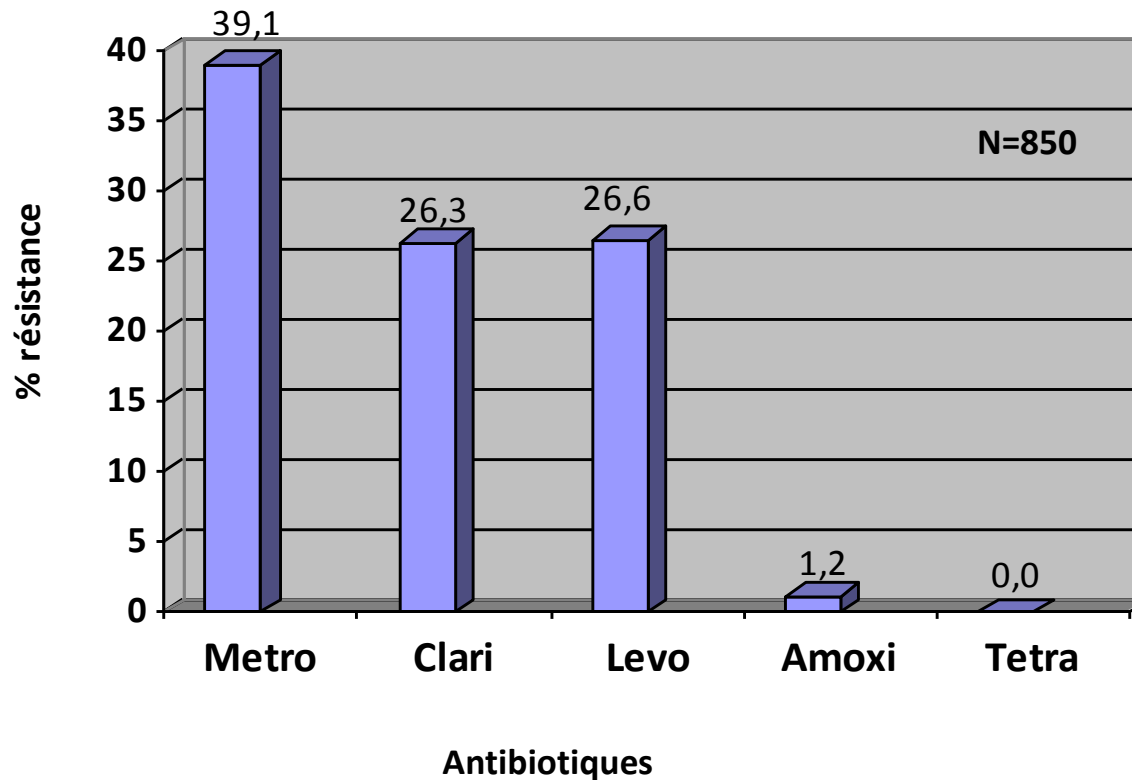
Antibiograms are performed by quantitative diffusion methods using MIC strips (Etest, bioMérieux) according to the recommendations of the European *Helicobacter pylori* Study Group (EHPSG). Interpretation of MIC results is done according to EUCAST guidelines (Clinical Breakpoint Table v. 6.0, valid from 2016-01-01)

# Number of antimicrobial agent for which a primary resistance of *H. pylori* is observed

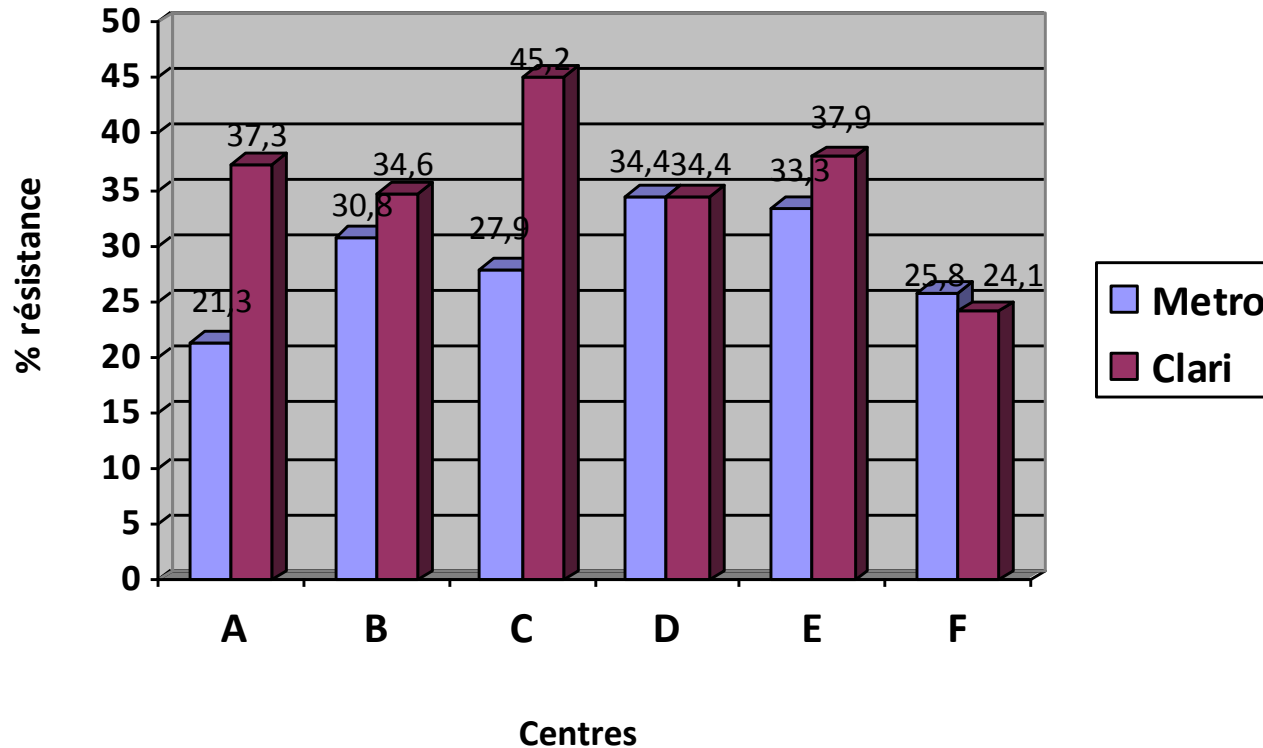


NB: Isolates for which resistance is observed to  $\geq 2$  different classes of antimicrobial agents (20% of total) may possibly be 2<sup>nd</sup> resistance missclassified as primary resistance) due to the lack of information/communication of previous exposure to antimicrobial treatment

## Primary resistance rate of *H. pylori* – Data of the Belgian NRC (year 2015)

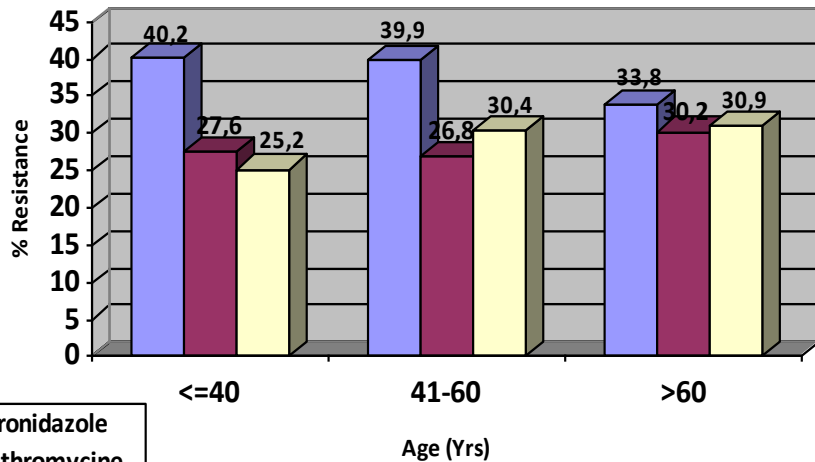


# Variation of primary resistance of *H. pylori* to metronidazole and to clarithromycin by different centers in Belgium – NRC data 2015

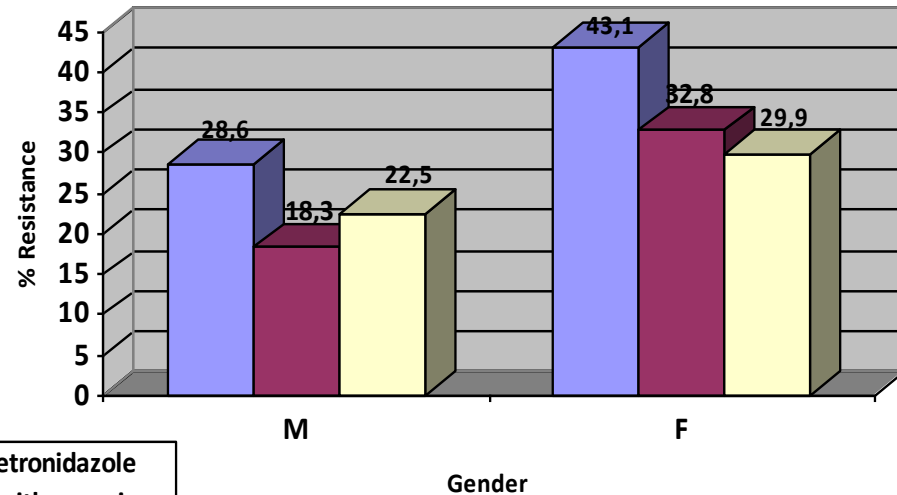


# Primary resistance of *H. pylori* to antimicrobial agents (NRC data 2015) by age groups, pathology and gender

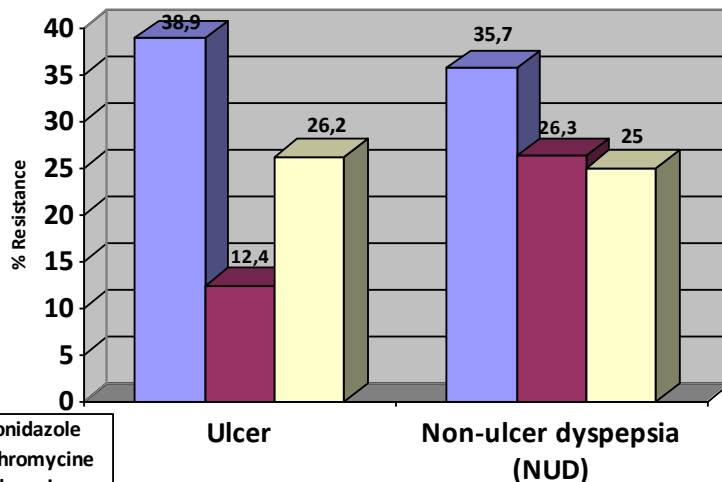
Age : Metro-R (40 and 41-60 yrs vs. >60 yrs; P <0.05)



Gender (F vs M): Metro-R (P <0.001)  
Clari-R (P <0.001)  
Levo-R (P=0.03)



Non-ulcer dyspepsia vs. Ulcer (G/D): Clari-R (P <0.001)



## Secondary resistance of *H. pylori* (R occurring following therapy failure)

