

P1013

Abstract (poster session)

**Sexually transmissible infections among young adolescents in Milan areas: a multicentre study**

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**Objective:** Sexually transmitted infections (STIs) are a major health problem affecting mostly young people, the exact magnitude of STIs is frequently unknown due to lack of country surveillance systems. Aim of this study was to determine the prevalence of STIs and relative risk factors among and adolescents in Milan areas, Italy.

**Methods:** From May to October 2011, 117 adolescents (63 female, 54%), median age 15 years, attending hospitals from the north-western areas of Milan, Italy, were enrolled. All subjects completed a questionnaire and provided a urine sample, which was tested for *Neisseria gonorrhoea*, *Chlamidia trachomatis*, *Mycoplasma hominis*, *Mycoplasma genitalium*, *Ureaplasma urealyticum/parvum*, *Trichomonas vaginalis*, *Treponema pallidum*, *Streptococcus agalataiae*, *Haemophilus ducrey*, *Citomegalovirus (CMV)*, *Herpes Simplex Virus 1 (HSV1)* and *Lymphogranuloma venereum* by a multiplex PCR assay: Seeplex® STI Master ACE Detection (Seegene, Seoul, Korea). Forty tree out of 117 adolescents (36%) were HIV-1 positive, 63% (74/117) were without any underlying infectious disease.

**Results:** Fifty seven (48,7%) out of 117 adolescent were sexually active (SA), 20 out of 57 (35%) had STIs as follow: 24.5% (14 cases) *U.urealyticum/parvum*, 7% (4cases) *C.trachomatis*, 1.7% (one case each) *M. genitalium* and *N.gonorrhoea*. Thirty-two (56%) out of 57 SA adolescents were HIV-1 positive and infected with *U. urealyticum/parvum* (37.5%, 12 cases) and *C.trachomatis* (6.2% 2 cases). A single case (3.1%) of mixed infection due to *C.trachomatis*, *N.gonorrhoea* and *U.urealyticum/parvum* was observed. Six out of 60 (10%) sexually inactive (SI) adolescents resulted positive for *U.urealyticum/parvum* (3 cases), *C.trachomatis* (2 cases) and *N.gonorrhoea* (1 case). Eleven out of 60 were HIV-1 positive and among this group one case of *C.trachomatis* and *U.urealyticum/parvum* infection was reported. For *T.vaginalis*, *T. pallidum*, *S. agalataiae*, *H.ducrey*, *CMV*, *HSV1* and *Lymphogranuloma venereum* any infection was reported.

**Conclusion:** STIs as expected were higher in SA adolescent than in SI and in HIV-1 positive patients ( $P < 0.025$ ). Twenty-two percent of SA adolescents resulted positive for at least one STIs. A prevalence of 14.5% (17/117) for *U. urealyticum/parvum*, was detected in the adolescents studied, even if its clinical significance has yet to be assessed. Findings suggest that surveillance and screening programs should be implemented to prevent sequels on this vulnerable population.