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## An Experience in the Prevention of HPV by and for Adolescents: A Community Randomized Trial of the Effect of Peer Health Education on Primary Prevention in a 1-Year Follow Up

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### ABSTRACT

**Background:** HPV is the most common sexually transmitted disease in many regions of the world. 15% was found in women aged 15-19 years but the highest incidence of infection from HPV can be found in sexually active adolescents: between 50% and 80% of them catch the infection within two to three years from their first sexual relationship. **Methods:** A community randomized trial regarding HPV infection and HPV vaccination, and sexual health was carried out, in a sample of secondary school students. Peer education intervention was carried out and 2 follows-up were carried out after the educative intervention to evaluate the effective outcomes in a 1-year follow up of the effect of peer health education on primary prevention knowledge, attitude and behaviour towards HPV. **Results:** The sample of 900 students, with age of  $16.6 \pm 1.4$  ds, 34.4% of which have sexual relationships. 64.6% of students in the experimental group said that they were aware of HPV, 83.4% were aware of how it is transmitted and 71.1% knew HPV vaccination, 54.7% perceived the level of danger with significant gender-related differences the percentages increased at T1. At T0, 14.1% of females were vaccinated: T1 they were 17.5% and 19.2% at T2. The main factors associated with the students' propensity to vaccination were: having at least one sister; being in favor of vaccinations in general; knowing that the vaccine is aimed at preventing cervical cancer; and being aware that they could be infected by HPV. **Conclusions:** The study carried out highlights important differences between the experimental group and the control group in terms of knowledge but, most importantly, in terms of behaviour and it proves how the application of new educational methods based on the involvement of youngsters right from the initial stages of the project can help them to change their behaviour and maintain it in time.

### KEYWORDS

HPV; Prevention; Adolescents; Peer Education; Evaluation Efficacy

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### References

- [1] Adamchak, S. E. (2006). Youth peer education in reproductive health and HIV/AIDS: Progress, process, and programming for the future. URL (last checked 12 August 2012). <http://archive.k4health.org/system/files/Peer%20Education%20Overview.pdf>
- [2] Agreement between the Government, the Regions and the Independent Provinces of Trento and Bolzano Concerning (2007). Strategies for active offer of the vaccination against infection from HPV in Italy. URL (last control 12 August 2012). [www.statoregioni.it/Documenti/DOC\\_016696\\_264%20csr.pdf](http://www.statoregioni.it/Documenti/DOC_016696_264%20csr.pdf)
- [3] Barreto, M. L., (2005) Efficacy, effectiveness and evaluation of public health interventions. *Journal of Epidemiology and Community Health*, 59, 345-346. doi:10.1136/jech.2004.020784
- [4] Bartolozzi, G., Bona, G., Ciofi, M., De Martino, M., Di Pietro, P., Duse, M. et al. (2007). Human

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- [5] Baseman, J. G., & Koutsky L. A. (2005). The epidemiology of human papillomavirus infections. *Journal of Clinical Virology*, 32, S16-S24. doi:10.1016/j.jcv.2004.12.008
- [6] Bertini, M., Braibanti, P., & Gagliardi, M. P. (2006) *Skills for life*. Milano: Franco Angeli.
- [7] Boda, G. (2001). *Life Skill e peer education: Strategy for personal and collective efficacy*. Milano: R.C.S. Libri SpA.
- [8] Chan, S. S. C., Yan Ng, B. H., Lo, W. K., Cheung, T. H., & Hung Chung, T. K. (2009) Adolescent girls' attitudes on human papillomavirus vaccination. *Journal of Pediatric and Adolescent Gynecology*, 22, 85-90. doi:10.1016/j.jpap.2007.12.007
- [9] Croce, M., & Gemmi, A. (2003). *Peer education: Adolescents as prevention actors*. Milano: Franco Angeli.
- [10] De Santi, A., Guerra, R., Morosini, P. et al. (2008). Health promotion at school: Educational objectives and shared skills. *Rapporti ISTISAN*, 1, 1- 174.
- [11] Derzon, J. H., Sale, E., Springer, J. F., & Brounstein, P. (2005) Estimating intervention effectiveness: Synthetic projection of field evaluation results. *The Journal of Primary Prevention*, 26, 321-343. doi:10.1007/s10935-005-5391-5
- [12] Di Giuseppe, G., Abbate, R., Liguori, G., Albano, L., & Angelillo, I. F. (2008). Human papillomavirus and vaccination: knowledge, attitudes, and behavioural intention in adolescents and behavioural intention in adolescents and young women in Italy. *British Journal of Cancer*, 99, 225-229.
- [13] Do, Y. K., & Wong, K. I. (2012). Awareness and acceptability of human papillomavirus vaccine: An application of the instrumental variables bivariate probit model. *BMC Public Health*, 12, 31. doi:10.1186/1471-2458-12-31
- [14] Ferrara, M., De Vito, E., Langiano, E., Gentile, A., & Ricciardi, G. (2006). *By Eros to Thanatos, AIDS and sexually transmitted diseases*. *Rapporti ISTISAN*, 20, 125-129.
- [15] Ferrara, M., Gentile, A., Merzagora, L., Tucci S., De Vito, E., Langiano, E., & Ricciardi G. (2004). The prevention of synthetic drugs: Survey on knowledge of synthetic drugs in a sample of students from the Secondary School specialising in Scientific Studies, of Cassino. *Educazione Sanitaria e Promozione della Salute*, 27, 108-117.
- [16] Ferrara, M., Langiano, E., & De Vito, E. (2012). A school based community randomized trial of the effect of peer health education on primary prevention knowledge, attitude and behaviours towards HPV among adolescents. *Italian Journal of Public Health*, 9, 20-32.
- [17] Ferrara, M., Langiano, E., Di Thiene, D., & De Vito, E. (2010). The project " D.E.A.Th. by Eros to Thanatos AIDS and sexually transmitted diseases" . A multimedia exhibitions a means of prevention of sexually transmitted infections. *Italian Journal of Public Health*, 7, 268-276.
- [18] Franco, E. L., & Harper, D. M. (2005). Vaccination against human papillomavirus infection: A new paradigm in cervical cancer control. *Vaccine*, 23, 2388-2394. doi:10.1016/j.vaccine.2005.01.016
- [19] Friedman, L. S., Kahn, J., Middleman, A. B., Rosenthal, S. L., & Zimet G. D. (2006). Human papillomavirus (HPV) vaccine: A position statement of the Society for Adolescent Medicine. *Journal of Adolescent Health*, 39, 620. doi:10.1016/j.jadohealth.2006.07.013
- [20] Giambi, C. (2011). Coverage rates of HPV vaccination in Italy. *Italian Journal of Public Health*, 8, S23-S27.
- [21] Goodstadt, M. S. et al. (2001) *Evaluation in health promotion: Synthesis and recommendations*. WHO Regional Publications, European Series, 92, 517-533.
- [22] Hoffman, B. R., Sussman, S., Unger, J. B., & Valente W. T. (2006). Peer influences on adolescent cigarette smoking: A theoretical review of the literature. *Substance Use & Misuse*, 41, 103-155. doi:10.1080/10826080500368892
- [23] IARC (2007). *IARC monographs on the evaluation of carcinogenic risks to humans. Volume 90: Human papilloma viruses*. Lyon: International Agency for Research on Cancer.
- [24] Kenneth, F., Schulz, K., F., Altman, D. G., Moher, D., & CONSORT Group (2010). *CONSORT 2010 statement: Updated guidelines for reporting parallel group randomised trials*. *Italian Journal of Public*

- [25] La Torre, G., De Vito, E., Martellucci, L., Langiano, E., & Ricciardi, G. (2002). Knowledge, attitudes, and practices regarding sexually transmitted diseases among students in three high schools in Cassino. *Annali di Igiene*, 14, 233-242.
- [26] La Torre, G., De Vito, E., Capelli, G., Langiano, E., Ferrara, M., & Ricciardi, G. (2003). Knowledge and attitudes of principals and school teachers in the province of Frosinone in the health education. *Educazione Sanitaria e Promozione della Salute*, 26, 290-297.
- [27] Landi, M. (2004) Peer education. In: E. Dalle Carbonare, E. Ghiottoni, & S. Rosson, Peer educator: Instructions for use. Milano: Franco Angeli.
- [28] Louvanto, K., Rintala, M. A., Syrj?nen, K. J., Gr?nman, S. E., & Syrj?nen, S. M. (2011). Incident cervical infections with high- and low-risk human papillomavirus (HPV) infections among mothers in the prospective Finnish Family HPV Study. *BMC Infectious Diseases*, 11, 179. doi:10.1186/1471-2334-11-179
- [29] Marmocchi, P., Dall' aglio, C., & Zannini, M. (2004). To educate to the life skills. Trento: Erickson.
- [30] Massini, S., Marona, R., Di Pinto, G. H., & Saulle, R. (2010) " Facolt? d' Amarsi" : When young people try to change the situation. Youth project as a tool for health communication and STD prevention. *Italian Journal of Public Health*, 7, 277-291.
- [31] Nizzoli, U., & Colli, G. (2004) Young people who risk their lives. Understand and treat high-risk behavior in adolescents. New York, NY: McGraw-Hill.
- [32] Pellai, A., & Boncinelli, S. (2003) Just do it! Risk behaviors in adolescence. Prevention manual for school and family. Milano: Franco Angeli.
- [33] Pellai, A., Rinaldin, V., & Tamborini, B. (2002) Peer education. Theoretical and practical manual of Empowerment peer education. Trento: Erickson.
- [34] Piana, A., Sotgiu, G., Castiglia, P., Pischedda, S., Cocuzza, C., Capobianco, G. et al. (2011). Prevalence and type distribution of human papillomavirus infection in women from North Sardinia, Italy. *BMC Public Health*, 11, 785. doi:10.1186/1471-2458-11-785
- [35] Pieralli, A., Fallani, M. G., Lozza, V., Corioni, S., Longinotti, M., Fambrini, M., & Penna, C. (2011). Age-specific distribution of Human Papilloma Virus (HPV) mucosal infection among young females. *Open Journal of Obstetrics and Gynecology*, 1, 104-108. doi: 10.4236/ojog.2011.13018
- [36] Roden, R. B. S., Morris Ling, B. S., & Wu T.C. (2004). Vaccination to prevent and treat cervical cancer. *Human Pathology*, 35, 971-982.
- [37] Schiffman, M., Castle, P. E., Jeronimo, J., Rodriguez, A. C., & Wacholder, S. (2007). Human papillomavirus and cervical cancer. *The Lancet*, 370, 890-907. doi:10.1016/S0140-6736(07)61416-0
- [38] Sopracordevole, F., Cigolot, F., Lucia, E., & Marchesoni, D. (2009) Knowledge on human papilloma virus (HPV) related genital lesions and vaccination against HPV in a sample of women of north-east Italy. *Minerva Ginecologica*, 61, 81-87.
- [39] Spizzichino, L. et al. (2005). Adolescenti e HIV. Adolescents and HIV. Information campaigns by adolescents and for adolescents. *Annali Istituto Superiore di Sanit?* , 41, 113-118.
- [40] Supporting Community Action on AIDS in Developing Countries (2006). Peer education: Outreach, communication & negotiation. Training Module. URL (last check 12 August 2012). [http://www.aidsallianceindia.net/Material\\_Upload/document/Peer\\_education\\_manual.pdf](http://www.aidsallianceindia.net/Material_Upload/document/Peer_education_manual.pdf)
- [41] Syrj?nen, S. (2005). Human papillomavirus (HPV) in head and neck cancer. *Journal of Clinical Virology*, 32, 59-66. doi:10.1016/j.jcv.2004.11.017
- [42] United Nations Population Fund (UNFPA) and Family Health International (FHI) (2005). Training of trainers manual. Youth peer education toolkit. New York and Arlington, VA: UNFPA and FHI. URL (last checked 12 August 2012). [http://38.121.140.176/c/document\\_library/get\\_file?p\\_l\\_id=33873&folderId=36046&name=DLFE-406.pdf](http://38.121.140.176/c/document_library/get_file?p_l_id=33873&folderId=36046&name=DLFE-406.pdf)
- [43] Vaccarella, S. (2010). Epidemiology of HPV infection and cervical cancer. In C. Giorgi (Ed.), HPV infection: From early diagnosis to primary prevention. Rome: Istituto Superiore di Sanit?.
- [44] World Health Organization (2007). Global strategy for the prevention and control of sexually

transmitted infections: 2006-2015: Breaking the chain of transmission. URL (last checked 12 August 2012). [http://whqlibdoc.who.int/publications/2007/9789241563475\\_eng.pdf](http://whqlibdoc.who.int/publications/2007/9789241563475_eng.pdf)

- [45] World Health Organization (2006). Preparing for the introduction of HPV vaccines: Policy and programme guidance for countries. URL (last checked 12 August 2012). [http://whqlibdoc.who.int/hq/2006/WHO\\_RHR\\_06.11\\_eng.pdf](http://whqlibdoc.who.int/hq/2006/WHO_RHR_06.11_eng.pdf) young