### Volume-5, Issue-7, July - 2016 • ISSN No 2277 - 8160

And B And A		Original Research Paper Medical	Science
		Awareness of Cervical Cancer and Hpv Vaccine A Mother Attending Immunization Clinic in West B	mong engal
Dr Subir Pal		DCH, MD	
Dr Saptarshi Banerjee		MD .Senior Resident, CNCI, Kolkata	
Dr Soumen Mukherjee		MD PGT, Dept. of Radiotherapy, IPGMER, Kolkata	
Dr Rajib Bhattacharjee		MD PGT, Dept. Of Radiotherapy, IPGMER, Kolkata	
ABSTRACT	Backgro prevent immun	ound: Cervical cancer is one of the most common causes of cancer mortality among women al tablev Objective: To evaluate regarding awareness of cervical cancer & HPV Vaccine among mo nization clinic.Method: It is cross sectional study conducted among mother attended immunizatic	though largely ther attending on clinic.

Result: Despite limited knowledge 74% mother intended to accept HPV Vaccine for their daughter.

## **KEYWORDS:**

### Introduction:

Commonest cancer cause of death among women in developing countries is cervical cancer(1).64,477 women died from the disease every year in INDIA. Among 1,22,844 women diagnosed with cervical cancer(2).Cervical cancer is the second most common cancer in women aged 15-44years(2). It is seen that 86% of all death due to cancer cervix are in low and middle income countries(3).In the pathogenesis of cancer cervix genital infection with oncogenic human papilloma virus(HPV) is necessary(4). There are 100 different viral genotypes, among them HPV 16 and 18 were indentified in about 70% of cervical cancer cases(5) and 6 & 11 genotype can cause genital warts(6). One way of prevention of cervial cancer is through vaccination against oncogenic HPV types(7,8,9,10). At present two vaccines have been approved by the U.S. Food and Drug Administration(FDA). These are the bivalent vaccine(Cervarix) and the quadrivalent vaccine(Gardasil)(10).Both are nearly 100% effective in preventing in cervical intraepithelial neoplasia 2(CIN 2),CIN 3, and condylomatous valvular disease related to the HPV genotype covered by the vaccines(11,12,13,14).IAP recommended 2 doses for 9-14 years old and for girls 15 year or older current 3 dose schedule will continue(15). The minimum interval between two dose should be 6 month.NON UIP Vaccination in INDIA recommended quadrivalent vaccine(16,18,6&11) 0.5ml at 0,2 and 6month starting age at 10-12 year and bivalent vaccine(16&18) 0.5 ml at 0 ,1 and 6 month starting at 9 year age. Both the vaccines are recommended in women up to 45 years age. Contraindication of vaccination is pregnancy and CIN 3.A prevaccination screening of evidence of precancerous stage is ideal and recommended in married women prior to HPV Vaccination (16).

Material & Method: This is a cross –sectional study of 50 women attending immunization clinic of a private chamber in WB. Data was collected between the month of March and April 2016. Informed consent was obtained from the women and they were given self administered questionnaire. The data was analysed using descriptive statistics.

### Analysis and Result: Figure 1 Education



Above pi-chart showed all the participants attending immunization clinic were literate and 62% had postgraduate and 38% had undergraduate level of education.

## **Figure 2 Occupation**



<sup>(</sup>hw - house wife)

Above pi-chart showed the 86% of the mothers were found to be house wife.

## Figure 3 Knowledge regarding the disease



Above pi-chart showed level of awareness and knowledge of HPV vaccine and cervical cancer .Only 24% of the participant had knowledge about the cervical cancer.

(ug-undergraduate, pg-postgraduate)



Among the mothers with postgraduate level of education 22.58% had knowledge about cancer of the cervix .Majority of the mother whether postgraduate(77.41%) level of education or undergraduate(73.68%) level of education do not know about the disease.



Figure 5 Education versus self vaccination

(ug - undergraduate, pg-postgraduate)

Compound bar chart showed willingness of self vaccination grouped together with level of education. Majority of the mother reluctant to take vaccine (undergraduate 63.15% and 80.64% of postgraduate mother refuse self vaccination).

# Figure 6 After a brief about the disease willingness of self vaccination.



Even after a short account of disease mothers are reluctant to take HPV vaccine. Only 26% of mother wish to take vaccine and 74% refuse.

Volume-5, Issue-7, July - 2016 • ISSN No 2277 - 8160

Figure 7 After a brief regarding the disease willingness to vaccinate daughter.



After a brief when mothers are asked if they wants to give vaccine to their daughter 74% said yes, 2% said no while 24% are indifferent.

### **Discussion:**

It is found that awareness of cervical cancer and HPV vaccine among mother attended immunization clinic very limited(76% mother do not know about the disease and vaccine)(Figure 3).Despite limited knowledge after receiving information about HPV vaccine 74% of mother wishes to give HPV vaccine for their daughter(Figure 7).NON UIP Vaccination INDIA recommended HPV vaccination in women up to 45 years age irrespective of sexual debut .Even after getting this information mothers are reluctant regarding their own health .Only 26% mother want to take vaccine (Figure 6).The mother in our study accepted education gladly and responded to a brief intervention indicating that education about cervical cancer HPV vaccine would be desirable .Mother generally believe that vaccine will protect their children health(17).Other study showed that an association between cervical cancer prevention knowledge and HPV vaccine acceptability(18,19).

### Limitation:

All the mother attending immunization clinic therefore, they may have a higher opinion of medical intervention than those who do not seek health care. The educational level in our participants were higher than the regional average which can interfere generalizability to less educated population .We did not ask the reason who declined vaccination.

### **Conclusion:**

Quadrivalent vaccine helps protect against 2 types of HPV that causes 70% of cervical cancer and 2 more type that causes approximately 90% of genital warts .lt also protect women of 9-26 years against about 72% vaginal cancer and up to 50% vulvar cancer.

Bivalent vaccine is indicated in female from 10-45 years of age for the prevention of cervical cancer. The efficacy result at the event trigger analysis were 94.3% against 6 months persistent infection and 91.4% against 12 month persistent infection(20).Despite limited knowledge about 74% of participant mother intended to accept HPV vaccine for their daughter after information provided them regarding cervical cancer and HPV vaccine.

## **REFERENCE:**

- Denny L. Cervical cancer: prevention and treatment. Discov Med 2012:14:125-131,(Pub Med).
- (2). ICO Information centre on HPV and cancer (Summary Report 2014-08-22). Human Papilloma Virus and Related Disease in India 2014.
- (3). Yeole BB, Kumar AV, Kurkureet A, Sunny L, Population based survival from cancer of breast, cervix and ovary in women in Mumbai, Asian Pae J. Cancer prev, 2014; 5 : 308 -315 (Pub Med)
- (4). Walboomers JNM, Jacoves MV, Manos MM, Bosh FX, Kummer JA, Shah KV, Snijders PJF, Peto J, Meijer (JLM, Munoz N) Human Papilloma virus is a necessary cause of invasive cervical cancer world wide, J Pathol, 1999; 189: 12 19.doi : 10.1002 / (SICI) 1096 9896 (199909) 189: 1 <12 ::</p>

AID – PATH 431 >3.0 . CLO ; 2F

(5). Munaoz N, Bosch Fx, de Sanjose S, Herrero R, Castellsajue X, Shah KV, Snijders PJ, Meijer CJ, Epidemiologic classification of Human papilloma virus types associates with cervical cancer. N Engl J med, 2003; 348: 518 – 27. (Pub Med)

- (6). de VIliers EM,Fanquet C, Broker TR,Bernard HV,Zur Hangen H.classification of papilloma virus,Virology 2004,324:17-27.doi:10.1016/j.virol.2004.03.033.(Pub Med)[Cross Ref].
- (7). Stanley mv, Human papilloma virus vaccine versus cervical cancer screening.Clin Oncol (R C oll Radiol) 2008; 220 : 388 – 94.
- (8). Escobar PF, Orr JW. The human papilloma virus vaccine : Current Status [last accessed on 10<sup>th</sup> March,2014] ; Female patient 2008 33 : 18 – 22. Available from www.femalepatient.com
- (9). Frarco El, Harper Dm. Vaccination against human papilloma virus infection. A new paradign in cervical cancer control [last accessed on 2005 Jan 16] ; vaccine 2005 23 : 2388 – 94. Available from : www.sciencedirect.com doi : 10.1016 / į.vaccine. (Pub Med)
- (10). Human papilloma virus vaccination. The American College of Obstetricians and Gynaecologists Committee opinion no.588.obstel Gynecol.2014;123:712-8[Pub Med].
- (11). Harper DM, Franco EL, Wheeler C, Ferris DG, Jenkins D, Schuind A, et al. GlaxoSmithkline HPV vaccine study group, Efficacy of bivalent<1 virus like particle vaccine in prevention of infection with HPV 16 and 18 in young women: A randomized control trial,Lancet,2004;364:1757-65(Pub Med).
- (12). Paavoner J, Nand P, Salmeron J, Wheeler CM, Chow SN, Apter D, et al. Efficacy of HPV 16/18 ASO4 adjuvanted vaccine against cervical infection and precancer caused by oncogenic HPV types(PATRICIA):Final analysis of a double-blind, randomized Group.Lancet,2009;374:301-14.(Pub Med).
- (13) Munaz N, Kajaer SK, Sigurdsson K, Iversen OE, Hermandez-Avila M, Wheeler CM, et al, Impact of HPV-6/11/16/18 vaccine on all HPV associated genital diseases in youn women. J Natl Cancer Inst.2010,102:325-39(Pub Med).
- (14). Donovan B, Franklin N, Guy R, Grulich AE, Regan DG, Ali H, et al, Quadrivalent human papillomavirus vaccination and trends in genital warts in Australia: Analysis of national sentinel surveillance data, Lancet Infect Dis.2011;11:3944[Pub Med]
- (15). IAP Immunization Schedule 2014.
- (16). IAP Text book of Pediatrics (Vol-1)  $5^{th}$  e
- (17) ).Perkins RB, Pierre Joseph N Marquez C. Iloka S.Clark JA. Why do low-income, minority parents choose HPV vaccination for their daughter? J Pediatr.2010;157:617-622.(PMC free article)[Pub Med].
- (18) .Lazcano-Ponce E, Rivera L Arillo-Santillan E, Salmeron J.Hernandez-Avila M.Munoz N .Acceptability of a HPV trial vaccine among mothers of adolescents in Mexico. Arch Med Res.2001;32:243-247.(Pub Med).
- (19). Davis K. Dickman ED.Ferris D, Dias JK.Human Papilloma virus vaccine acceptability among parents of 10to 15 years old adolescents. J Low Genit Tract Dis,2004;8:188-194(Pub Med).
- (20). Version CER/P1/IN/2012/02/ dated 20<sup>th</sup> March, 2012 Adapted from EUSPC Last updated 30<sup>th</sup> January,2012.