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RESEARCH ARTICLE

KNOWLEDGE ATTITUDE AND PRACTICES REGARDING HEPATITIS B VACCINATION AMONG DOCTORS OF NISHTAR HOSPITAL MULTAN

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Regarding Self Medication Among 4th year MBBS Students of NMC, Multan, Pakistan

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ABSTRACT

Background: A number of evaluations (at small & and large scale) regarding vaccination against HBV have been carried out but very few of them reflect population opinions.
Objectives of Study: To find out knowledge, attitude and practices regarding vaccination against HBV among Doctors of NMC, Multan.
Study Design: It was a cross-sectional epidemiological study.
Setting: The study was carried out in different surgical, medicine and gynecology wards N.H. Multan, and data was completed and analyzed in department of community medicine N.H. Multan.
Duration: Study was conducted from 08th September to 15 September 2017
Study Population: H.Os, PGRS, M.Os of medicine, surgery, and Gynecology wards of N.H, Multan.
Exclusion Criteria: Professors and senior registrar of Nishtar Hospital, Multan.
Sampling Technique: Convenience sampling Non-Probablity.
Sample Size: *350*
Results:

- Residence of doctors 72.6% urban / 27.4% rural
- Age of doctors 58.9% (20-25), 39.1% (26-30), 1.7% (31-35) & 0.3 (>35)
- Designation of doctors 60% (H.Os, 38% PGRs, 2% M.Os, and above that.
- Knowledge of doctors about route of transmission of HBV infection: 68.3% complete knowledge / 31.7 % incomplete knowledge.
- Knowledge about HBV infection : 26% complete knowledge/ 74% incomplete knowledge
- %age of doctors tested for Hepatitis B: tested 93.7%/ Not tested 6.3%
- Vaccination of doctors against Hepatitis B: vaccinated 92.9% / Not vaccinated 7.1%
- Vaccination status of family of doctors against Hepatitis B: vaccinated 76.3%/ Not vaccinated 23.7%
- Knowledge about preventive measures: complete knowledge 58.3%/ incomplete knowledge 41.7%

Conclusion: From our study we concluded that doctors are now keener about vaccination against HBV. Most of the doctors (PGRs, M.Os) reported better knowledge, keen attitude and positive practices regarding vaccination against HBV.

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INTRODUCTION

Hepatitis B is an infectious disorder of liver caused by HBV. Hepatitis is a global problem with 66% of all worlds' population living in areas where there are high levels of infection. HBV is a member of Hepadnaviridae with partially double stranded circular DNA molecule. Although replication takes place in liver, virus spread to blood where viral proteins and antibodies against them are found in infected people.

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Man is the only reservoir of HBV infection which can be spread either from carriers or cases. HBV has prolonged incubation period (i.e. 4-26 weeks.). Virus is present in blood during incubation period (for a month before the appearance of jaundice) and acute phase of disease. Body fluids such as blood, semen, vaginal secretions, and saliva of infected person are the main source of infection. There are two main routes of infection.

These include: 1) Horizontal route through I/V drug use, infected unscreened blood products, sexual contact. 2) Vertical route through perinatal (from HbSag positive mother). Major risk factors among doctors are:

Dental and surgical procedures, needle pricks, unsterilized medical equipments and unsafe blood transfusions. Six million Pakistanis are suffering from Hepatitis B & its infection rate is steady rise. The main reasons for its prevalence are lack of proper health facilities, poor economic status and insufficient public awareness about transmission of major communicable diseases such as Hepatitis B. Acute Hepatitis with recovery and clearance: 70% have mild or no symptoms and don't develop Jaundice, remaining 30% have nonspecific constitutional symptoms such as headache, myalgia, arthralgia, anorexia, fever, jaundice and upper right quadrant pain (which usually precede development of jaundice by few days to 2 weeks.) Liver is often tender but only minimally enlarged. Almost all cases, resolve without treatment. Chronic disease may develop in non endemic areas maybe severe may progress to primary liver cancer.

HBV is investigated by determining level of specific antigens and antibodies. In acute infection HbSAg, HbcAb and HBV DNA are detected in blood. Chronic state is marked by persistence of HbSAg for six months. A highly effective recombinant Hepatitis B vaccine containing HBsAg is available and is capable of producing active immunization in 95% of normal individuals for a least 25 years. Three injections at 0, 1, 6 months are given intramuscular to newborns (not previously immunized) health care professionals, nurses, trainees and paramedics. Vaccine can be given together with immunoglobulin (active, passive immunization). If exposure has already occurred. In acute hepatitis full recovery occurs in 90-95% cases of adults, remaining 5-10% develop to chronic infection which continues for life. Hepatitis B virus DNA persists in the body after infection and in some people disease recurs which is called Reactivation.

The objectives of this study are

- To study knowledge, attitude and practice of doctors regarding vaccination against HBV infection
- Advocacy regarding vaccination and prevention of HBV infection

MATERIALS AND METHODS

The following cross sectional study has been performed at different surgical, medicine and gynecology wards of N.H. Multan, and data was completed and analyzed in department of community medicine of N.H. Multan. Subjects are doctors in their profession, whereas they are selected randomly from the different words of the hospital. Knowledge and aptitude test has been taken regarding the different aspects of hepatitis B infection. Total 350 number of doctors are selected. House Officers, postgraduate residents, medical officers are included for this piece of work. Empowerment levels of all these doctors are assessed with a questionnaire method, followed by statistical analysis were done with the prior scores. All the samples are categorically separated according to age & different knowledge regarding under mentioned things.

Several scales of questionnaire Assessments are as follows

- Assessment regarding the knowledge of doctors about route of transmission of HBV infection.
- Knowledge assessment regarding HBV infection
- Assessment of age in doctors when they are first tested for Hepatitis B
- Vaccination of doctors against Hepatitis B
- Vaccination status of family of the doctors against Hepatitis B
- Knowledge about preventive measures
- Now the scores are accumulated and placed to find the observations through bar-diagrams.

Table 1. Frequency distribution of residence of Doctors

Total = 350

Residence	No.	Percentage (%)
Urban	254	72.6
Rural	96	27.4

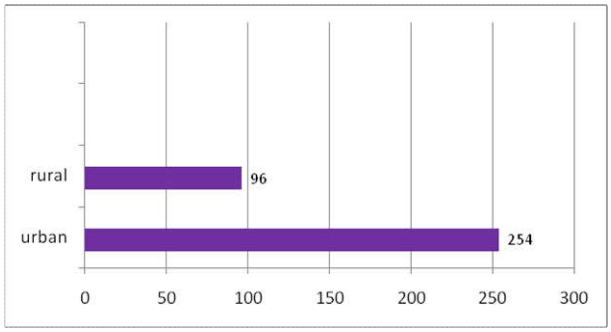

Figure 1. Out of total, 72.6% lives in urban areas and 27.4% lives in rural areas

RESULTS AND DISCUSSION

According to our study during 2012 in Nishtar Hospital Multan, 68.3% doctors have complete knowledge about route of transmission of HBV infection, 26% doctors have complete knowledge about clinical squeal of HBV infection, 93.7% doctors have been tested for HBV, 92.9% doctors are vaccinated against HBV, 76.3% doctors have their family members vaccinated 6.9% have their all family members vaccinated against HBV % 58.3% doctors have complete knowledge about preventive measures.

Table 2. Frequency distribution of age of doctors

Total = 350

Age	No.	Percentage (%)
20-25	207	58.9
26-30	136	39.1
31-35	6	1.7
More than 35	1	0.3

Distribution of doctors according to their age

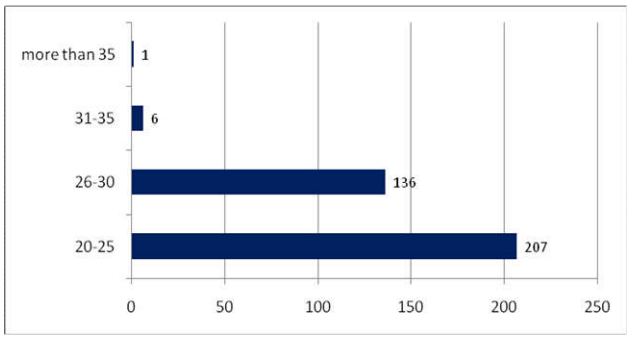

Figure 2. In this research, out of 350 doctors, 58.9% are in age group 20-30, 39.7 % are in age group 26-30, 1.7 % are in age group 31-35, 0.3% are in age group > 35

Table 3. Frequency distribution of doctors according to their designation

Total = 350

Designation	No.	Percentage (%)
H.O	210	60
PGR	133	38
M.O & above that	7	2

Distribution of doctors according to their designation

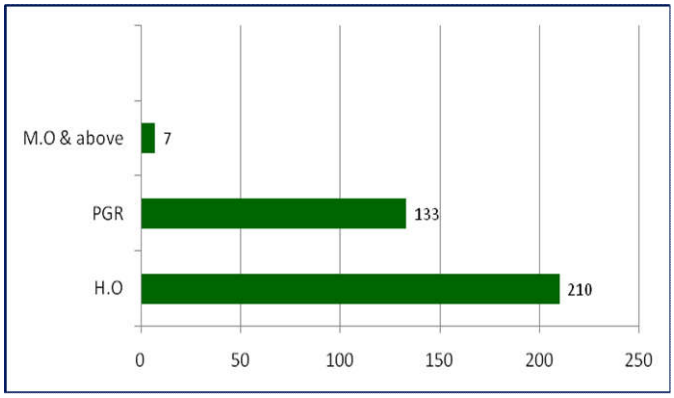

Figure 3. 60% are H.O2, 38% are PGRs,2% are M.Os

Table 4. Frequency distribution route of transmission of HBV

Total = 350

Knowledge	No.	Percentage (%)
Complete	239	68.3
Incomplete	111	31.7

Knowledge about route of transmission of HBV infection

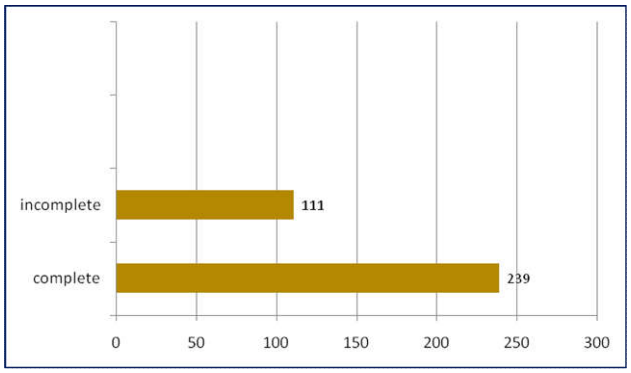

Figure 4. 68.3% doctors have complete knowledge about route of transmission of HBV infection and 31.7 have incomplete knowledge

Table 5. Frequency distribution of knowledge about HBV infection

Total = 350

Knowledge	No.	Percentage (%)
Complete	91	26
Incomplete	259	74

Knowledge about HBV infection

All health professionals can contribute to disease control; doctors are mostly considered role-models. Doctors are vital in controlling the epidemic of hepatitis B by effective vaccination & taking protective measures while dealing with patients and counseling of patients. According to a study in Nigerian Teaching Hospital, 91.9 % doctors receive at least 1 dose of vaccine & only 53.8% were fully immunized with 3 injections spread over 6 months. A survey in United States 2002-2003 showed that 75% had received 3 or more doses of hepatitis B vaccination.

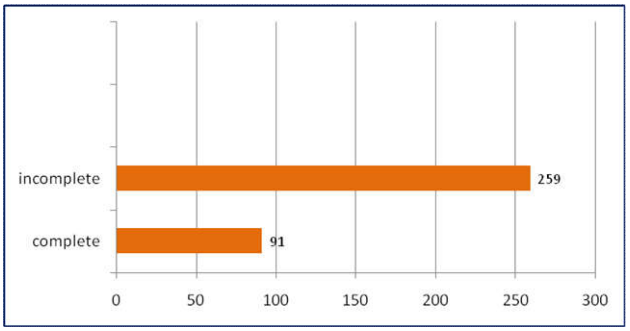

Figure 5. 26% doctors have complete knowledge about HBV infection and 74% have incomplete knowledge

Table 6. Frequency distribution of test for Hepatitis B

Total = 350

Knowledge	No.	Percentage (%)
Yes	328	93.7
No	22	6.3

Doctor Tested for Hepatitis B

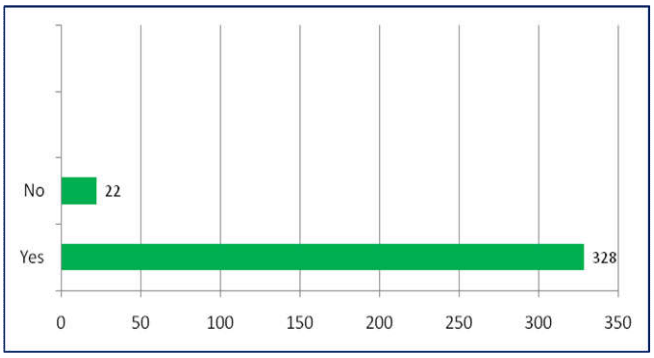

Figure 6. 93.7% are tested, 6.3% are not tested for HBV infection

Table 7. Frequency distribution table of vaccination against Hepatitis B

Total = 350

Vaccination status	No.	Percentage (%)
Yes	325	92.9
No	25	7.1

Vaccination against HBV

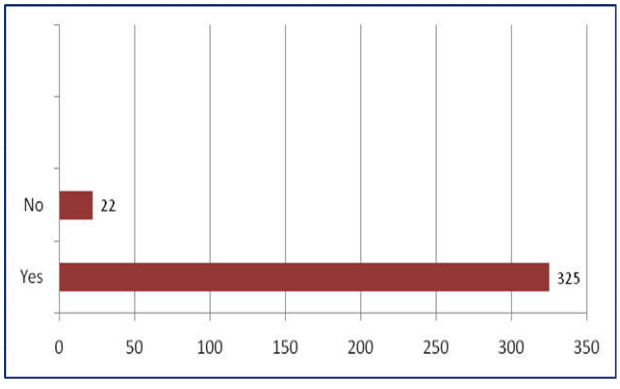

Figure 7. Among doctors of Nishtar Hospital, Multan 92.9% are vaccinated and 7.1 are not vaccinated against HBV

Table 8. Frequency distribution table of vaccination of family against Hepatitis B

Total = 350

Family vaccination status	No.	Percentage (%)
Yes	267	76.3
No	83	23.7

Vaccination Status of Family against Hepatitis B Virus

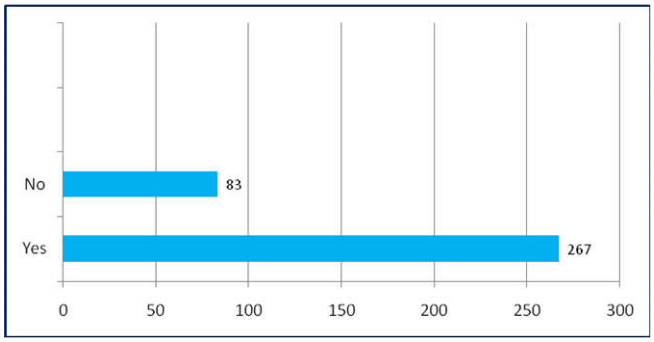

Figure 8. Out of 350 docotrs, 267 doctors have their family members vaccinated against Hepatitis B, 83 haven't

Table 9. Frequency distribution table of vaccination of family members

Total = 350

vaccination of family members	No.	Percentage (%)
Complete	24	6.9
Incomplete	326	93.1

Vaccination Status of Family against Hepatitis B Virus

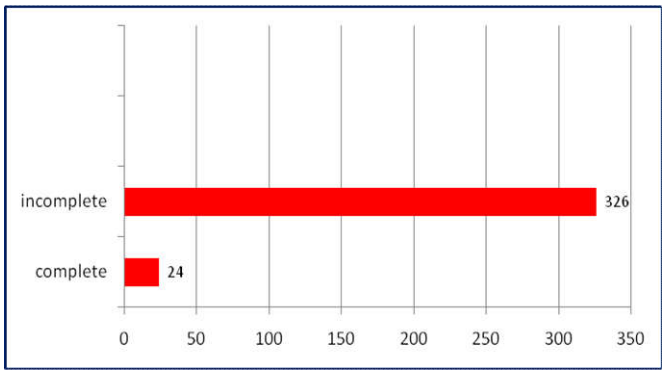

Figure 9. Out of 350 (100%) doctors, 93.7% doctors have their some family members vaccinated against HBV, 6.3% have theirall family vaccinated against hepatitis B

Table10 : Frequency distribution of preventive measures

Total = 350

vaccination of family members	No.	Percentage (%)
Complete	204	58.3
Incomplete	146	41.7

Knowledge about preventive measures

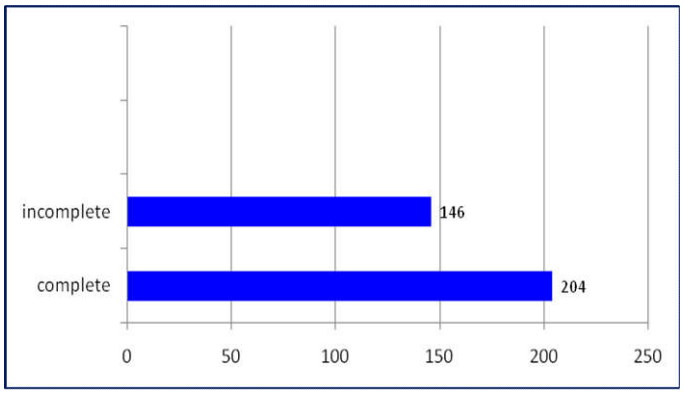

Figure 10. 58.3% doctors have complete knowledge about preventive measures, 41.7% have incomplete knowled

However, since the initial recommendation for vaccination of doctors in 1982 in U.S, estimated no. of annual infections among doctors has decreased from 10,000 to 304 in 2004.

A research carried out in 1994 showed that overall compliance rate HBV vaccination among doctors is 40.3% (56.9% in Thailand, 58.1% in Copenhagen, 65.1% in LONDON. The "East African Medical Journal", Nov 2000, reported compliance rate for hepatitis B vaccination among doctors to be 80.9%.

Conclusion

HBV is a hazardous viral infection. Everyone with medical background should have full grip on knowledge about its virulence. We recommend and integrated approach to hault the spread of this disease.

- Screening for Hepatitis B must be done. A doctor must be cautious as to cope with patients of different diseases and infections is a big deal.
- Mere testing against Hepatitis be is not sufficient. Standard vaccinations protocol should be followed.
- Being a doctor it is our duty to ensure Hepatitis B vaccination for our family members too. It is well said that "CHARITY BEGINS AT HOME" here for a doctor we must say "DUTY BEGINS AT HOME".
- It is always said that "PREVENTION IS BETTER THEN CURE". Regarding issues of Hepatitis B, healthcare professionals must follow the protocols of washing hands, discarding used needles and wearing gloves before any procedure.
- We hope in future doctors will be having
- A thorough knowledge on any disease.
- Complete vaccination against communicable diseases.
- Preventive measures for any medical practice.

Recommendation

- Doctors should possess complete knowledge about route of transmission of HBV infection.
- All doctors should be vaccinated against HBV because they are at high risk of contracting the infection while dealing with patients.
- Doctors should follow preventive measures during their clinical practice which includes avoiding repeated use of same gloves, discarding used syringes and blades and adopting protective measures during invasive procedures. Post exposure prophylaxis with HBV vaccination alone or a combination of HBV vaccination and passive immunization is recommended if any health care worker is exposed to HBV via infected blood or bodily fluids.
- As doctors possess knowledge against this virus, they should initiate programs on T.V channels for awareness of public so that they may be protected from this fatal disease. Introducing a self care system in the community which includes early detection of danger signs of HBV could form a package of health education for any community setting.
- There is an increase need to improve the training of doctors regarding disciplines followed in medical profession e.g. it should be ensured that blood and blood products are screened against HBV and HCV from standard laboratories.

REFERENCES

Cardell K *et al*. 2008. J Infect Dis 2008 Jun 10: Diepolder HM, J Infect Dis., Jun 10;

Centers for Disease Control and Prevention (CDC), MMWR Recomm Rep 2008 Sep 19; 57:1.

Centers of Disease Control and Prevention (CDC). MMWR Rrecomm Rep 2012 Jul 6;

Loannou GN., Ann Intern Med 2011 Mar 1: 154:319.

Marcellin P *et al*., N Engl J Med 2008 Dec 4; 359:2442

Multiple Outbreaks of Hepatitis B Virus Infection Related to Assisted Monitoring of Blood Glucose among Residents of Assisted Living Facilities – Virginia, 2009-2011 Source: MMWR, May 18, 2012, Vol. 61(19): 339-43 Authors: Smith EA, Jacques- Carroll L, Walker

Related Searches: Antiviral agents, guidelines,hepatitis b, hepatitis b surface antigen test,serum,hepatitis b, chronic, interferon alfa 2a,screening procedure, viral hepatitis vaccines

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Roberto J. Firpi, MD, and Paul Martin, MD 2002. [Medscape General Medicine 4 (3), 2002] Anastasia Rivkina, Pharm D, and Sergey Rybalov, MD [Pharmacotherapy 22(6): 721-737]

The National Perinatal Hepatitis B Prevention Program, 1994-2008 TY, Sirotkin B, Murphy TV Source: Pediatrics, April 2012, Vol, 129(4): 609-17

Updated CDC Recommendations for the Management of Hepatitis B Virus-infected Health-Care Providers and Students Soure: MMWR Recommendations and Reports, July 6, 2012, Vol61 (RR03): 1-12

Wasley A *et al*., Infect Thompson ND *et al*., Ann Intern Med 2009 Jan 6; 150:33

Yuen M-F *et al*. 2011. *Clin infect Dis*., Mar 1;52;624.

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