

The Theoretical and Practical Knowledge of Nurses and Midwives Regarding to the Hepatitis-B Virus (HBV) Vaccination: A Cross-sectional Study in Konya – Turkey

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ABSTRACT

The aim of our cross-sectional study was to investigate the factors that affected Hepatitis-B Vaccination (HBV) knowledge of the nurses and midwives, serving at various medical facilities as part of the primary healthcare services in Konya, Turkey. The study was conducted during March 01 – 31, 2004, including 127 consentient nurses and midwives (out of 161) serving at 22 different healthcare centers in the region. In the survey, their source of information with regards to HBV vaccination varied from continuing education programs (37%) to book or brochure reading (11.8%), and their formal nursing education (11%). A statistically significant relationship was found between the number of years employed in this profession and knowledge of Hepatitis markers that are done prior to the beginning of vaccination calendar ($p=0.01$) ($p<0.05$). Majority (74.8%) of the participants reported that they gave information to families about potential side effects of HBV vaccination. In conclusion we have suggested that a special training program should be given to nurses and midwives that included topics like Hepatitis markers, vaccine administration techniques, doses, proper record taking, briefing individuals and families.

Key words: Hepatitis-B virus, HBV vaccine, immunization, vaccination, nursing

Introduction

With a chance to repeat itself and eventually become chronic, the HBV infection is a common and very dangerous disease that is considered to be one of the most significant viral infections today which causes high morbidity and mortality all around the world¹⁻⁴. Shown at the studies carried out in Taiwan, the patients having chronic HBV infection were found to have greater tendencies in developing chronic liver disease, and their risk of hepato-cellular carcinoma were found to be increased by 100 or even higher¹. Nearly 5% of the world population (300M) has chronic HBV infection that causes chronic Hepatitis, cirrhosis and hepato-cellular carcinoma^{1,4-8}. It is estimated that active chronic Hepatitis develops in the 25% of carriers³. Every year 500,000 to 1 million people dies of the HBV related liver diseases, such as cirrhosis and hepato-cellular carcinoma¹.

In our country, the prevalence rate of infection is 20–25% and carrier rate is 5–14%. The risk of developing

a chronic carrier state following an acute infection is inversely proportional to the age at which the infection took place; for instance, that risk is as high as 90% in the newborn period⁶. In 1–2% of the cases with acute Hepatitis infection, fulminant Hepatitis develops. In infants, the symptoms of liver failure (encephalopathy, coagulation defects, cerebral edema, etc.) are observed in most of the cases. The mortality rate in fulminant Hepatitis is about 60–90%⁶.

The long term goal of the immunization is the global eradication of disease, and preventing the occurrences of disease on more people and societies is the short term goal⁹. Therefore, the eradication of HBV infection should be one of the highest priorities in public healthcare¹⁰. Principally, the healthcare professionals should perform immunoprophylaxis through active and passive immunization regarding to healthcare services of infants, chil-

dren, adolescents and adults over extended periods of time, in order to reach these goals⁹.

Material and Methods

This is a cross-sectional study conducted in March 01–31, 2004 in Konya, in order to examine the HBV vaccination-related knowledge and practices of the nurses and midwives serving at the primary healthcare services in Konya province, and to determine any affecting factors.

The target population of the study consists of 161 nurses and midwives, serving at 22 healthcare centers around the city of Konya, from which 127 of them agreed to participate (78.8% participation).

The questionnaire was developed after a review of technical literature^{1,5,6,9}. It was tested in a pilot study with 10 individuals, those who would be later excluded in the study, and all necessary revisions were made. The questionnaire had 34 questions including 7 about the demographic characteristics of nurses and midwives, and 27 questions about the Hepatitis B vaccinations regarding to its knowledge and practical implementations. There were open-ended questions about the storage con-

ditions of Hepatitis B vaccines, about the place of the vaccination box, about the temperature at which the vaccines should be kept, about the tests needed to be checked before starting the vaccination schedule, about the information regarding HBV diagnostic tests and the factors affecting immunization, induced by vaccination.

The data were collected by going to these clinics and completing the survey in face-to-face interviews. Permission to conduct the study was obtained from the directors of clinics and verbally from the participants.

The study data were evaluated using descriptive statistics and χ^2 on our computers (SPSS for Windows 10.0). The arithmetic means were shown with standard deviation.

Results

In the analysis of socio-demographic characteristics of participating nurses and midwives it was determined that 67 (52.8%) were graduates of a medical vocational high school, 55 (43.3%) were graduates of nursing associate degree programs, 4 (3.1%) had bachelor's degree in nursing and only one (0.8%) had a master's degree in nursing. The length of employment for both midwives and nurses was 11.88 ± 6.25 years (range 2–37). Their av-

TABLE 1
DISTRIBUTION OF HBV DIAGNOSTIC TEST INFORMATION AND KNOWLEDGE ABOUT HBV VACCINE AND PRACTICES OF NURSES AND MIDWIVES WHO WORK IN KONYA PROVINCIAL CENTER NEIGHBORHOOD PRIMARY CARE CLINICS

	N	%
Knowledge of hepatitis markers		
HBsAg, anti-HBs	64	50.4
Anti-HBc	9	7.1
Test not done	10	7.9
No information	44	34.6
Test analysis is done		
Yes	38	29.9
No	62	48.8
No information	27	21.3
Knowledge about conditions for storage of hepatitis vaccine		
Hepatitis vaccine storage site in the refrigerator		
Bottom shelf	74	58.3
3rd shelf	49	38.5
2nd shelf	2	1.6
No information	2	1.6
Temperature at which HBV is stored		
True (+2) – (+8) °C	86	67.8
False (+4) – (+8) °C	32	25.2
(+3) °C	4	3.1
(+2) – (-2) °C	1	0.8
No information	4	3.1
Knowledge about HBV vaccine		
At what age is the HBV vaccine given to infants		
0–1 months	115	90.6
No information	12	9.4

TABLE 2
DISTRIBUTION OF NURSES' AND MIDWIVES' KNOWLEDGE ABOUT HBV VACCINE ADMINISTRATION

	N	%
According to what is the hepatitis vaccination dose determined		
It is standard, it does not change	55	43.3
According to the age (months/years) of the child	62	48.9
According to the vaccine drug insert information	5	3.9
According to the child's weight	5	3.9
Which muscle is used to administer hepatitis vaccination in children		
Deltoid muscle	124	97.6
Vastus lateralis muscle	3	2.4
Knowledge about Hepatitis B side effects		
No known side effects	56	44.1
Mild fever, pain	21	16.5
Redness, swelling at injection site	19	15.0
Fever, pain, redness and swelling at injection site	31	24.4
For how many years does the hepatitis b vaccine provide protection		
Lifetime	58	45.7
10 years	7	5.5
8 years	35	27.6
5 years	22	17.3
No information	5	3.9
Total	127	100.00

erage age was found to be 31.68 ± 6.15 years (range 22–55). 120 of them (94.5%) were married, 7 (5.5%) were single. The majority also had children with 108 nurses and midwives (85.0%), among whom 51 (47.2%) of them had two children, 47 (43.6%) had one children and 10 (9.2%) had three children.

The distribution about answers regarding to the HBV diagnostic tests (such as whether or not they had done the analysis – and if so, who that person had been) is shown in Table 1, given by the nurses and midwives »then« serving at various primary healthcare clinics in Konya.

There were refrigerated vaccine cabinets in every primary healthcare clinic inferior to the Konya province. Distribution of data regarding to knowledge of nurses and midwives about the storage conditions of Hepatitis vaccine, are shown in Table 1.

The HBV vaccination knowledge of nurses and midwives were assessed both in theory (Table 1) and on the implementation level (Table 2, Table 3). Nearly, all of the participating nurses and midwives (123, 96.8%) stated that they had paid attention to the first opening date of the vaccines, 94 (74%) stated they had marked the time of opening on the vials, and 120 (94.5%) told they had looked for the vaccine expiration date before using. In addition, 50 (39.4%) of the participants stated that they had always read the vaccine prospectus, 11 (8.7%) stated that they had recorded the commercial brand name, and 18 (14.2%) indicated they had checked the records for brand name about the earlier use of vaccine.

Among the participants, 12 (9.4%) of them stated that they had told brand name to the family, 10 (7.9%) stated that they had asked to the family of that name when no records had been available, and 117 (92.1%) specified the period between two vaccinations as »at least« 4 weeks.

The participating nurses and midwives were asked about their source of information regarding to HBV vaccination, also asked whether they had lacked of any particular knowledge, and if yes, what it had been, as shown in Table 3.

Half of the participants (64, 50.4%) indicated that they had lacked the information regarding to source of knowledge about HBV vaccine administration, whether or not they needed information, and, if so, what kind of information about which they wanted to learn are shown in Table 3. The same number of nurses and midwives (64, 50.4%) also revealed that they had lacked the knowledge of factors that affect immunization, therefore, leaving the remaining half (63, 49.6%) who only knew about it.

The participants were asked what information they had given to families as briefing right after vaccination; 95 (74.8%) stated that they had been informing the families about the potential side-effects, 10 (7.9%) stated they had told them they would need to have their Hepatitis markers checked in five years, 8 (6.3%) indicated that they had informed the families about vaccination schedule, and 14 (11.0%) stated that they hadn't committed to any such briefings.

TABLE 3
DISTRIBUTION OF NURSES' AND MIDWIVES' SOURCES OF AND REQUESTS FOR INFORMATION ABOUT HBV VACCINE ADMINISTRATION

Sources of information about HBV	N	%
From physician–nurse	13	10.2
During formal nursing education	14	11.1
From reading about it in a book / brochure	15	11.8
From continuing education	47	37.0
Haven't received information	38	29.9
Need information about HBV		
Yes	113	89.0
No	14	11.0
What type of information about HBV vaccine do you want to learn		
Protection and side effects	23	18.1
Vaccine brands	4	3.1
Current information and developments	27	21.3
No requests for information	73	57.5
Total	127	100.0

In addition, 62 participants (48.8%) told they hadn't conducted HBV test evaluations, 27 (21.3%) further admitted that they had no knowledge on this matter, at all (Table 1). When asked who had done the Hepatitis test analysis 77 (60.6%) responded the physician, 15 (11.8%) responded infectious diseases specialists, and 27 (21.2%) said they hadn't known. Asked about the names of the HBV diagnostic tests and its administration, 64 (50.4%) of the participants answered as »HBsAg, anti-HBs« and 44 (34.6%) said, they had not known.

Discussion

Chronic HBV infection is a leading global health problem with affecting more than 350 million patients worldwide⁷, from which two people die in every minute. The virus may cause liver cirrhosis, cancer and death. As the treatment options are quite »limited« for infected patients, the British Medical Association believes that vaccination was the most effective method in prevention of the HBV infection¹¹. To accomplish avoiding disease, it is recommended that all individuals in high risk group along with the newborns, adolescents, and all of the children up to 11–12 years who hadn't been vaccinated, must take vaccination⁶.

Hepatitis infections, in general, remain being top concern among the healthcare personnel all around the world⁴. The risks that they are already involved are of the highest degree for the most educated, even the most experienced hands. Any physical contact between the infected body fluids and a simple cut on the skin, or inside the mucous membrane may lead to full-spread infection and pose a major threat against overall public healthcare. Despite the published guidelines and training programs, there is still an ongoing risk of »percutaneous ex-

posure« following accidental needlestick injuries⁶. Every year, the healthcare workers constitute the 4% of the new HBV infections in US, from which 200–300 of these workers die from HBV-related complications¹¹.

HBV is a lot more contagious than the AIDS virus by a factor of 50–100. For instance, the cases involving HBV in England and Wales have reportedly increased by 135% from 1992 (489) to 2003 (1151)¹¹. HBV spreads through contact with blood or any other body liquids from an infected person, from mother to baby during the carriage, from child to child through open wounds, a shared toy and saliva. Sharing razor blades and toothbrushes are also a big risk¹¹.

According to Maral et al. (1999), it was determined that 28.3% of primary healthcare personnel had developed immunity against Hepatitis B following recovery from their illnesses, 23.4% had been vaccinated against Hepatitis B, and 1.7% had been determined to be anti-HCV positive. Clearly, these rates do not cover a big portion¹².

Suffice to say, any healthcare personnel dealing with the HBV infections should be periodically educated about viral Hepatitis and trained accordingly in an attempt to overcome such incidents in working places. Similarly, in a study by Turk et al. (2002), there was the mention of serious need for healthcare staff in the hospitals to get regular education about blood-borne illnesses¹³.

Diagnostic tests

Hepatitis is seen in four phases. These phases take form depending on the genetic characteristics, presence of other viruses, age and immunosuppression. The first phase is the incubation period, involves the length of time between the first contact with HBV and the rise of aminotransferase levels. While this period takes 4–8 weeks

for adults, it may take »years« for the newborn infants. Most of the time, viral replication continues without showing any of the disease symptoms; however, the serum is positive for HBsAg, HBV-DNA and HBeAg⁶.

There are serological tests to detect HBsAg and HBeAg just like there are assays aimed to detect antibodies, such as anti-HBs, anti-HBc, IgM anti-HBc and those against HBeAg. Furthermore, there are also hybridization assays and gene amplification techniques in order to detect the HBV DNA with its amount⁹.

HB surface antibodies can be detected during acute infection period. IgM anti-HBc is quite specific to the diagnosis of an acute infection for adolescents and adults. On the other hand, the infants developing prenatal infection usually do not have IgM anti-HBc. Those with chronic infections of HBV have HBsAg, anti-HBc, and in some cases anti-HBs in circulation. While both anti-HBs and anti-HBc are detected in infected people, there is only anti-HBs found in the people having HBV vaccination⁹. Anti-HBs »negative« was defined as »<1.5 mLU/mL«; a level of »1.5–10 mLU/mL« in pre-vaccination was regarded as »insubstantial« and »>10 mLU/mL« in post-vaccination was defined as »reaction«¹⁴.

There is a correlation between the presences of HBeAg in the blood serum, high titrations of HBV and stronger infectivity. Besides, the HBeAg and HBV DNA tests are proved to be useful candidate selection that is able to receive antiviral therapy, and at observing their reaction to the therapy.

Knowing about the HBV diagnostic tests is an important issue for healthcare personnel to carry on consultation. If they are not the ones who should be insightful, then who shall be?

Vaccine storage & handling

The majority of the participants (86, 67.8%) knew that the vaccines were needed to be stored between +2 and +8 °C, and 74 (58.3%) stated that vaccines should be stored at the bottom shelf (Table 1). Nevertheless, these rates were expected to be higher.

Improper storage of vaccines may result in immunization failure. The recommended temperature for keeping HBV vaccine is between 2–8 °C⁹. Once the vaccine is frozen, it is spoiled^{9,15}.

Vaccines freeze when refrigerator temperature drops to zero degrees Celsius or below, especially when they had a direct contact with an ice supply or exposure to cold weather without sufficient protection¹⁵.

Proper storage and handling of vaccines is critical to their efficacy and safety. Storage and handling instructions may be product specific. Therefore, it is important to read and follow the manufacturer's recommendations, also known as the prospectus or the package insert, for each product regarding: storage temperature, exposure to light during storage, expiration/best use time, and shaking of the product to assure uniform vaccine suspension. Maintaining vaccines at the appropriate temperature from arrival from manufacturer to patient adminis-

tration is a very important aspect of proper immunization delivery programs.

Without doubt and without exceptions, the storing place for vaccines »including the work hours« is refrigerator. Vaccines should be stored in the middle, not in the door or against the back of the refrigerator. In the event of refrigerator break-down or power failure, vaccines should be removed promptly to an adequately refrigerated container. In either case, a working thermometer should be kept inside the storing place and temperature should be monitored frequently.

The vials

Paying attention to the best-use-time (expiration date) is a fundamental issue in immunization. Having a designated individual responsible for handling and storage of vaccines is a recommended practice. Only one vial should be opened at a time. Organizing vaccines according to expiration date is key avoiding wastage by ensuring that products with earlier expiration dates are used before the products with later dates.

The opened vials should be kept on a separate tray so »locating them« could be easier. Noticing the expiration date on label, vaccines should be disposed properly in order to prevent inadvertent uses. The first opening date of each vial should be marked on its label⁹.

Sometimes, it seems to be an economical approach – rather than recommendation, to keep using vaccines starting from the opened flacons in accordance with the »Cold Chain principle« instead of disposing them immediately¹⁶.

In this study, almost all of the nurses and midwives (123, 96.8%) were careful to check vial opening dates and most of them (94, 74.0%) recorded that information onto their labels. Considering the significance and vitality of this fundamental issue, the result may seem satisfactory, yet, it is not complete.

We have also observed almost all of the participants paying attention to opening and expiration dates of the vials, and some of them, in most cases very few, regularly checking the prospectuses, taking fine records, making archive searches, showing or designating all sorts of proper actions. However, according to the American Academy of Pediatrics (AAP), records of the administration site, administration techniques and the expiration date are recommended to be taken upon each immunization⁹.

The National Childhood Vaccine Injury Act (NCVIA) stipulates that the physicians administering vaccines that are under the scope of Vaccine Injury Compensation Program (VICP) must record the date of administration, vaccine manufacturer, serial number and the vendor's contact information in the patient's record⁹. It is our belief that the health care personnel should be given thorough information relevant to this issue.

Vaccination

When the nurses and midwives were asked how they had determined the dosage for HBV vaccination, 43.3%

answered that it was a standard dose which did not change (Table 2). We expected that this rate would be higher. A non-standard or low dose vaccination is not considered to be valid and needs to be repeated appropriately. The infant records that show late vaccination or missed doses are needed to be marked in an informative way such that it should tell us to complete the immunization⁹.

The majority of the nurses and midwives (124, 97.4%) knew that HBV vaccination was administered through the deltoid muscle and 3 (2.4%) stated that was given in the *vastus lateralis* muscle (Table 2). This is an expected and encouraging result. Because the subcutaneous fatty tissue is very thick in the gluteal region there is risk of damaging the sciatic nerve, so the outer-upper quadrant of the hips should not be used for vaccine administration. Because otherwise has a lowered effectiveness in stimulating the immune system, HBV vaccination should not be given in the hips for any age groups⁹.

Due to adjuvant containing nature of HBV vaccine, injection should be applied deep into the muscle tissues, not any close to surface. Subcutaneous or intradermal administrations should be avoided in order to prevent local skin irritations, inflammation, granuloma formation and necrosis⁹.

In this study 11 participants (8.7%) indicated that they had recorded the commercial brand names of HBV vaccines used in administration. Nevertheless, it is considered that the success of HBV vaccination did not depend on the continuity of same brand, thus, a similar immune response (through the products of different manufacturers) was received without any significant difference^{9,14}.

Predominant S including vaccine is a commonly used one. Recently, it was reported that Pre S1 vs. Pre S2 antigenic vaccines were more successful at unresponsive cases comparing to isolated-S antigenic vaccines. In a study, it has been determined that recombinant S antigenic vaccines should be considered for healthy children due to the availability of same antibody response in the pediatric ages, along with their cheaper prices¹⁷.

Infant immunization

To question »how old the babies were when the HBV vaccination was to be administered« the majority of participants responded as »0-1 months« (115, 90.6%) (Table 1). This was a satisfactory result. Once children have been immunized their bodies can fight those diseases if they come into contact with them. If a child is not immunized they will be at risk from catching the disease and will rely on other people immunizing their children to avoid becoming infected.

For protection, three separate doses of HBV vaccination are administered. According to generally applied schedule, the first two vaccinations are given one month apart, and a third one is given »6 months« after the first administration. Infants are vaccinated at 0, 1 and 6 months⁶. It should be remembered that the cost of vac-

ination for the newborn infants is less than the cost of a possible medical treatment^{6,11}.

With respect to the prevention of prenatal infections, it is essential that all pregnant women should complete serological detection tests for HBsAg, in order to early-determine which infants were to be introduced a post-exposure immunoprophylaxis⁹.

Because the immunity system of newborn is immature, 90% of the infected infants are likely to become chronic asymptomatic HBV carriers. For the infants infected by HBV at the prenatal period, there is considerably a high risk of developing »chronic hepatitis«.

The rate of chronicization of Hepatitis B infection in the children younger than 5 years old varies from 30-60%. This rate is 3-10% in older children, adolescents and adults. If that happens, Cirrhosis or hepato-cellular carcinoma (liver cancer) develops when they become adults⁶.

In accordance with the »HBV surveillance strategy plan« prepared by World Health Organization (WHO) and approved by the Advisory Committee on Immunization Practices (ACIP), the Hepatitis B vaccination is administered during childbirth. The purpose of this strategy is to prevent the development of HBV infection during the early stages of childhood and decrease the number of chronic carriers within endemic societies. For an infant to complete the triplet is more likely if HBV immunization is started at the childbirth⁷.

58 participants (45.7%) answered to the question about the length of protection afforded by HBV vaccination as lifelong and 35 (27.6%) eight years (Table 2). Today, hepatitis B immunization is applied with a recombinant vaccine that has a high reliability and effectiveness¹⁸.

The effectiveness of HBV vaccines (authorized in US) with respect to HBV infections and clinical Hepatitis B in the US is 90-95% on children and adults. It is reported that protection was found to have a long-term effect. In the long term studies carried on children and adults, immunization was shown to last for 12 years or even more without a sign of decay, indicating a protection still-in-effect against HBV infections, even at undetectable levels of anti-HBs concentrations⁹.

McGrane and Staines (2003) examined the nurses' (N=120) understanding of HBV, their attitudes and their acceptance of Hepatitis B vaccination. Results indicated that their participants were aware of the etiology and infectivity, and the acceptance rate was high¹⁹.

The leading reasons for such a high acceptance, or participation included: free cost (81%), caring for clients with HBV (78%), and benefits of the vaccine (75%)¹⁹.

Knowledge base

The nurses and midwives were asked about their source of information about HBV vaccination, and 37% responded as their in-service education programs and training exercises, 11.8% indicated as reading books and relevant material, and only 11% pointed out their formal nursing education (Table 3). Considering the group who

hadn't acquired HBV information from nowhere (29.9%) and those of others getting the knowledge thru informal ways, the importance of university education and regular training programs for healthcare staff is unquestionable, thus, a proper education about viral diseases, immune system, immunization, the HBV and HBV vaccination should be presented, course material should be prepared and distributed, and training exercises should be conducted.

A statistically significant relationship was found between the number of years in profession and the knowledge of Hepatitis markers prior to beginning of immunization calendar ($p=0.01$) ($p<0.05$). In addition, statistically significant relations were found between the education level of participants and their knowledge about markers ($p=0.04$), HBV vaccination types, possible side effects ($p=0.00$) and the factors affecting immunity ($p<0.05$).

A statistically significant relation was found between the participant ages and their knowledge about Hepatitis markers before vaccination (the need for checking those markers) and the minimum time between vaccine doses ($p=0.01$) ($p<0.05$).

There were also statistically significant relations found between the participant ages and their knowledge about marking the vial opening time ($p=0.03$) and recording the commercial brand names ($p=0.02$) ($p<0.05$). Statistically significant relations were found between the years of employment and knowledge of the optimum temperature for storing ($p=0.00$) and that with the Hepatitis marker knowledge before starting vaccination calendar ($p=0.01$) ($p<0.05$).

Post-vaccination

The NCVIA, enacted in 1986, stipulates that the corresponding risks and benefits should be explained to patients and parents if applicable⁹. In our study, the participants were asked what information they had given to the families after vaccination. Although 74.8% stated they had been informing the families about potential side-effects, the overall results in the questionnaire were far from being satisfactory. Regarding to the family briefing session held at post-vaccination by nurses and midwives in this study, rate of education and content quality were

found to be quite low. While this is part of their job and part of professions, the resulting situation leads to either they were not aware of this job, or they did not know about it. No matter what, this has to be improved.

Included in the new »Vaccine Information Sheets« (VIS) there is a place for signatures indicating that the patient or parents had »read and understood« what was written. While asking for signature is at personnel's own discretion, the AAP suggests that the physicians' records should include whether or not the patient representatives had received VIS, thus, been formally informed about the matter⁹.

The WHO has recommended that every child should be vaccinated in order to prevent infant deaths from vaccine preventable diseases. To this end, parents, as the most versatile contributors to childhood vaccine schedules, should be equipped with enough knowledge and awareness on this very matter. They need to be encouraged to ask questions to be sure they had a clear understanding of the information conveyed. Healthcare personnel need to know how much the parents had comprehended about the vaccine that has been given to their children. It is clear that the healthcare personnel's knowledge level about this subject must be at the required level.

Keeping that »the risk of infection decreases with every successful immunization« on our mind, we concur that the healthcare personnel ought to know well about HBV diagnostic tests and the infection prevention methods so they could help the global cause in »big picture« with increasing the public awareness by means of adequate briefing and counseling for the patients and families, those who would probably look for making the mention and recommend vaccination as volunteers in the first place. By all means, we should make sure the nursing staff is kept up-to-date and very well educated, starting from their formal educations at the college.

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TEORIJSKA I PRAKTIČNA ZNANJA MEDICINSKIH SESTARA I PRIMALJA O CIJEPLJENJU PROTIV VIRUSA HEPATITISA B (HBV): TRANSVERZALNO ISTRAŽIVANJE U KONYI, TURSKA

S A Ž E T A K

Cilj našeg transverzalnog istraživanja bio je utvrditi čimbenike koji su utjecali na znanje medicinskih sestara i primalja o cijepljenju protiv hepatitisa B (HBV), služeći na raznim zdravstvenim ustanovama, kao dio primarne zdravstvene usluge u Konyi, u Turskoj. Istraživanje je provedeno tijekom ožujka, 2004. godine, uključujući 127 suglasnih medicinskih sestara i primalja (od ukupno 161) koje rade na 22 različita zdravstvena centra u regiji. U anketi, njihov izvor informacija o HBV cjepivima, variralo je od neprekinutog programa obrazovanja (37%), čitanja knjiga ili brošura (11,8%), i njihovog formalnog obrazovanja o skrbi (11%). Statistički značajna razlika je pronađena između broja godina zaposlenih u ovoj struci i znanja o markerima hepatitisa koji su pripremljeni prije početka kalendara cijepljenja ($p=0,01$) ($p<0,05$). Većina (74,8%) ispitanika izjavilo je da je obiteljima pružilo informaciju o mogućim nuspojavama cijepljenja HBV. U zaključku smo predložili da se poseban program osposobljavanja treba omogućiti medicinskim sestrama i primaljama koji bi obuhvaćao teme kao što su markeri hepatitisa, pravilne tehnike cijepljenja, doziranje, pravilno registriranje cijepljenja, informiranje pojedinaca i obitelji.