

# **Epidemiology      Bulletin**

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## **Knowledge-Attitude-Practice Survey of the Parents of Attendees on Hepatitis B and Its Paid Vaccination in Chengchung District, Taipei City.**

In November 1983, Department of Health launched a long term Hepatitis B Control Program in order to prevent and control the unusually high prevalence of hepatitis B infection among inhabitants in the Taiwan Area. The Limited Hepatitis B Vaccination Program which was one of its main topic had begun since July 1984. It covered only the newborns of high risk mothers with positive HBsAg due to insufficiency of vaccine and priority in the time scheduled vaccination policy. The above mentioned persons of the top priority in the LHBVP were entitled to be vaccinated free of charge. As the provision of HB vaccine became sufficient, this limited vaccination program was expanded to cover all newborns at government's expense since July 1986. Before that, a year trial of providing paid vaccination to all Taipei City kindergarten attendees had begun since December 1985. Only 14.46% (9500/65684) of all Taipei City kindergarten attendees' parents were willing to let their children be vaccinated at their own expenses. A total number of 7870 (11.98%) kindergarten attendees were vaccinated. In March and April 1985, Chengchung Health Station of Taipei City conducted a KAP survey of the parents of 1100 kindergarten attendees within its own district on hepatitis B and its paid vaccination. Five hundred twenty nine samples of 4 kindergartens in Chengchung District were selected by nonrandomized method (kindergartens too small in size or too difficult to carry out the survey were excluded from this survey). The rate of response was 82.99% (439/529) and 414 (78.26%) of questionnaires were analyzed as valid samples.

The content of the questionnaire consists of the following parts:

- Part 1. Personal data: age, domicile, occupation, education, relationship between respondents and vaccinees.
- Part 2. Knowledge: consists of 8 questions to understand how well they know about the function of liver, what is hepatitis B and its cause, mode of transmission and sequelae.
- Part 3. Attitude to the hepatitis B vaccine and vaccination
- Part 4. critics and suggestions.

Results of part 1 are shown in table 1. Results of part 2 revealed that most of the respondents know the cause and sequelae of hepatitis quite well, and that rates of correct answer are 88.16% and 99.28% respectively. But only half of them (55.07% and 54.59%) know the correct answers to how the disease is transmitted and the correct method of prevention. 9.42% know the function of liver. 66.67% know where and how to take hepatitis B paid vaccination.

The main sources of their knowledge about hepatitis B come from newspaper and magazines (44.34%), broadcasting and television (37.96%), medical personnel (9.57%), friends and relatives (6.06%), colleagues (1.91%).

Their attitude towards the hepatitis B paid vaccination, as shown in table 2, revealed that one third of them are not willing to let their children be vaccinated. 57% of them express a strong concern to vaccine's effectiveness and 20% of them complain that the cost of the paid vaccination is too expensive. They suggest that the program should be a part of the social welfare and the vaccine should be delivered at government's total or half expense.

45.17% of all respondents who react unfavorably to the paid vaccination program consider it too inconvenient to bring their children to health station for vaccination. The reasons why they react like that are: they were really too busy to have time to see their children being vaccinated (78.61%), or too concerned about that taking the vaccination might affect or disturb their children's study (8.02%), or the health station is too far away (3.74%), or 9.62% had no confidence to its effectiveness and over-concern about its complication and sequelae.

Most of the respondents consider that it would be most desirable to have their children vaccinated in group in kindergarten (59.90%), or to make kindergarten responsible to arrange their children to be vaccinated in health station collectively (7.97%). Only one third (30.68%) will bring their children to health station to be vaccinated.

The previous infection of hepatitis B of respondents shows a statistically significant positive relation to respondents' knowledge and attitude to hepatitis B (One way ANOVA  $df = 2/411$ ,  $F = 9.97$ ,  $P < 0.01$ ). There is no statistically significant relationship between respondents' knowledge and personal background.

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Editorial notes: The Phase II Hepatitis B Control Program had already been approved by the Executive Yuan. One of its main topics is to continue and enforce the implementation of hepatitis B vaccination program which include the continuation of prenatal hepatitis B markers screening and free vaccination of all newborns. The Expanded Hepatitis B Vaccination Program will start from July 1986, expanding its target of coverage to all children under 6 without previous vaccination and medical personnel with proof of susceptibility at their own expenses. Children under 6 will be allowed to be vaccinated without proof of susceptibility because the Hepatitis Control Steering Committee of Department of Health had carefully considered the fact that the prevalence of hepatitis B infection among children under 6 is around 20 to 30%, and that the injection of hepatitis B vaccine to HB carrier is proved to be safe with no increased risk of adverse reaction and other socioeconomic factors. It needs four doses of HB vaccine to complete the HB vaccination. The first three doses should be vaccinated at an interval of 4 weeks, the fourth dose should be vaccinated at an interval of 10 months after the third dose. The vaccinees have to pay for each dose NT\$300 and NT\$20 as the cost of vaccine and injection fee respectively. All eligible vaccinees of age under 6 may apply for HB vaccination through their kindergartens collectively. Special arrangement will be made by local health authorities to deliver the vaccination properly. Public or private health sectors are invited to participate in this program to promote community health and social welfare. Those who are interested should contact their district health authorities.

**Table 1: Personal data of 414 respondents.**

Variables	Categories	No.	%
Relation to Vaccine	Father	129	31.16
	Mother	270	65.22
	Others	15	3.62
Age	10 ~ 14	3	0.72
	20 ~ 24	3	0.72
	25 ~ 29	38	9.18
	30 ~ 34	188	45.41
	35 ~ 39	134	32.37
	≥ 40	48	11.59
Domicile	Taiwaness	275	66.43
	non-Taiwaness	137	33.09
	Others	2	0.48
Occupation	Civil servant	120	28.99
	House wife	105	25.36
	Self employed	94	22.71
	Private enterprise employee	45	10.87
	Others	50	12.07
Education	≥ College	183	44.20
	High school	155	37.44
	Junior school	46	11.11
	≤ Primary school	30	7.25

**Table 2: Willingness of 414 respondents to receive Hepatitis B vaccine at their own cost.**

Variables	Categories	No.	%
Willingness	Yes	147	35.51
	No	143	34.54
	No view	114	27.54
	Others	10	2.41
Reason for disapproval	Uncertain of vaccine's effectiveness	82	57.34
	Too expensive	29	20.28
	Too busy to have their children be vaccinated	5	3.50
	Others	27	18.88