
CHILDREN'S INCIDENCE OF ABSENTEISM, FAMILIAL CONDITION AND IDEAS ABOUT VACCINES: A PERSONAL INTERVIEW SURVEY

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ABSTRACT

The present study covers 79 children under 6 years of age living in the outskirts of Bauru-SP, Brazil, and surveyed at Unidade Básica de Saúde (Vila São Paulo), who were absent from vaccination shots. Aiming to identify social characteristics, vaccine awareness, vaccination records and reasons that prevent parents from taking their children to the health center absentees were interviewed in their homes. 47 children were found, and the absences were rooted in the great family mobility due to social difficulties. These are starting families, connubial type, whose responsible individuals have low educational level and are unemployed or in manual unqualified jobs. 98% of families are poor with incomes 0.25 below minimum wage. In general was good vaccin awareness. Absenteism was explained by forgetfulness and child disease. UBS hours and distance from their homes were also mentioned. 64% of children referred to as absents by UBS had taken all the shots previous. As a conclusion, absentees showed be given opportunities to get in line with the vaccination schedule until the local Family Health Program is implemented.

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KEY WORDS: vaccination absenteeism, immunization, vaccinal coverage, absents, living conditions and health

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INTRODUCTION

Vaccination of children in the early months of life offers specific protection against serious diseases that can cripple or kill them. Therefore, children vaccination results in improvement of the general health level of the community by its reflex on the health indicators, specially the children mortality rate. In this sense, targets for vaccination were established aiming to attain adequate levels of collective immunity able to prevent transmission of immunopreventable diseases.

The basic health unit is in charge of population vaccination in any given area and it should not be restricted only to the vaccination health team. Likewise, children vaccination does not have to take place only when the mother or guardian comes to the health unit with this specific objective. More than that, all members of the health staff should be prepared to contribute actively to the success of a vaccination plan and take advantage of every opportunity to verify and implement the level of immunization of the susceptible population (MASCARETTI et al., 1996).

In Brazil there are children excluded from the benefits of vaccines due to problems with access. In this context, the multivaccination campaigns, among others, have a suppletive role. However, the adequate coverage of susceptibles cannot rely only on these campaigns. Accessibility to primary health services would be a more reasonable exit at a lower cost. For these reasons, it seems relevant to focus on children living in areas deprived of these services, searching for reasons for possible failures in the vaccination schemes.

In this context, the objective of this study is to identify aspects that can be related to failure in vaccination of children living in areas deprived of elementary health care.

METHOD

All the families of 79 children below 6 years of age living in Pousada da Esperança I and II, distant neighborhoods in Bauru, SP, were studied and considered by the Basic Health Unit as absentees from vaccination in 1999 and that were in the same situation in December 2000, when this study was conducted. The neighborhood

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does not possess its own health unit and people have to go to the nearest health unit in Vila São Paulo when they need a doctor.

Absenteeism was related as non-attendance to the scheduled date for vaccination and that, after 30 days of the missed date, telegrams were sent with 30-day intervals. In the records it can be found the name of the children, name of parent or guardian, address and vaccination schedule, according to the Technical Rules of the Immunization Program (SÃO PAULO, 1998).

The home interview was done in the months of December 2000 and January 2001 by means of a questionnaire with identification, data, family traits, information and a comparative box with the vaccination schedule from the health unit and the children's vaccination card. Measures were taken to localize the majority of families, even when not living in the neighborhood anymore.

Data were analyzed with the help of the Epi-info software, version 6.04 (DEAN, A. G. et al., 1994).

DISCUSSION

In the neighborhood a marked mobility was observed: only 43 out of the 70 families could be found at the available address. Those that were not localized in the neighborhood, after frustrated attempts to localize them in kindergarten, municipal schools and community centers, only 5 out of the 37 were retrieved by means of contact with the respective health unit of the new neighborhoods they were living in. Thus, only 47 out of the 79 families were included in the study.

Comparing age of the retrieved children to the non-retrieved it was observed that 80% of the absentees were in the age range of less than 10 months or more, with no significant difference between retrieved and non-retrieved children. It is also noteworthy the high proportion of absentees starting from 10 months, that is, the age period for reinforcing doses (TABLE 1).

TABLE 1 – Distribution of children according to the retrieval status and age. Pousada da Esperança, Bauru-SP, 2000.

Age in months	Retrieved		Not Retrieved		TOTAL	
	Nº	%	Nº	%	Nº	%
< 10	9	19.00	7	21.90	16	20.25
10 to 5	19	40.00	8	25.00	27	34.18
>15	19	40.00	17	53.10	36	45.57
TOTAL	47	100	32	100	79	100

$X^2 = 2.07$; $p = 0.355$

The mean family size was 4.79 persons, being the minimum 2 and maximum 10 persons per family.

In what regards the family type and familiar life cycle, 75% were conjugal and 70% were starters. It should be stressed that 11 families (25%) were monoparental (mother-only families) (TABLE 2).

TABLE 2 – Distribution of absent children according the family type and life cycle. Pousada da Esperança, Bauru (SP) – 2000.

Family Type	LIFE CYCLE							
	Constitution		Matura tion		Mixed		TOTAL	
	ñ	%	ñ	%	ñ	%	ñ	%
Conjugal	26	59.1	6	13.6	1	2.3	33	75
Monoparental	5	11.4	1	2.3	5	11.4	11	25
TOTAL	31	70.5	7	15.9	6	13.6	44*	100

*Excluded 3 of other groupings.

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FIGURE 1 shows the general aspect related to the education of head of families and mothers.

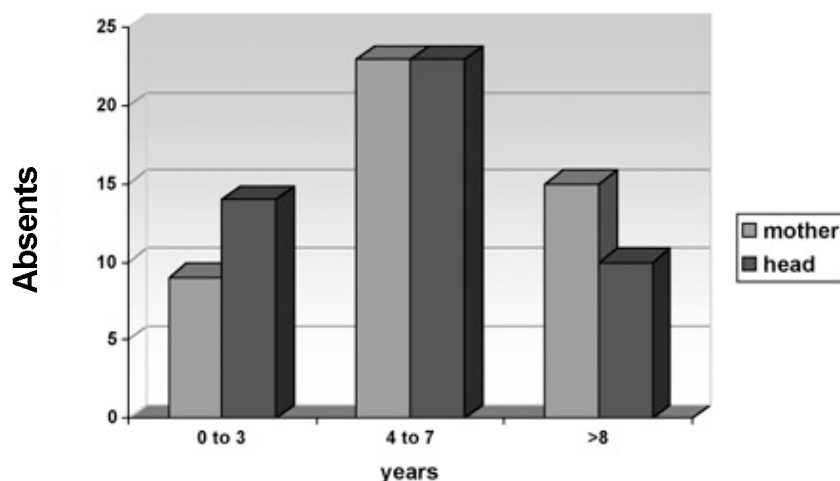


FIGURE 1 – Level of education (in years) of heads of families and mothers of absent children.

Maximum education attained in both groups was 11 years, therefore, nobody had a college education.

FIGURE 2 depicts the group of occupation of head of family and mothers.

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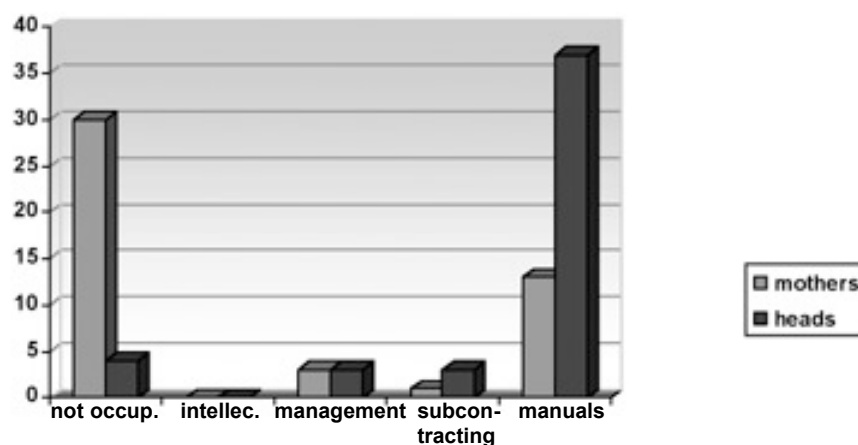


FIGURE 2 – Group of occupation of mothers and family heads of absent children.

In TABLE 3 one can see the number of absentees according to the family income in minimum wages.

TABLE 3– Distribution of absentees to vaccination according to the monthly income in minimum wage (MW). Pousada da Esperança, Bauru (SP) – 2000.

INCOME (in MW*)	ñ	%
< 2**	10	21.27
2 - 2.99	12	23.53
3 - 3.99	14	29.79
≥ 4	10	21.28
TOTAL	47	100

* Excluded 3 of other groupings.* Basic salary (BS) = R\$ 151.00 – December 2000. (1 US\$ = 1.97 R\$)

** 1 family with 0 income.

The mean family income was R\$ 521.60, varying from 0 to R\$ 1,200.00 and R\$ 470.00 was the average (3.1 MW). In what regards the purchase power, half the families had income below 3 minimum wages.

TABLE 4 shows the family income in needed per capital minimum wages (BSNpc).

TABLE 4 – Distribution of absentees according to the monthly income in needed *per capita* (BSNpc). Pousada da Esperança, Bauru (SP) – 2000.

INCOME (in BSNpc)	n	%
Poverty conditon	46	97.87
Poverty line	1	2.13
TOTAL	47	100

Mean = 0.104

46 of the studied families lived with less than 1/4 of the (BSNpc), which, according to MONTALI (1990), identifies these families as “in the poverty line condition”, not earning enough to subsist.

The mean income was 0.104 and the amplitude of variation ranged from 0 to 0.390 BSNpc. Therefore, it should be noted that no family at all had income above 0.5 BSNpc, that is, above the precariousness condition according to Montali (1990).

In the study of the vaccination status of children, according to the opinion of the interviewed, it was observed that the children that are under the responsibility of others than the mother, apparently were jeopardized in what regards vaccination.

In general terms, the results obtained show a good level of knowledge of those that answered the questions, which showed a high level of awareness on the importance of vaccines as prevention of diseases. Those that answered were unanimous when questioned on the importance of vaccines: 95% recognized it a prevention of disease (TABLE 5).

TABLE 5 – Distribution of absentees, according to the oppinion on the importance of vaccines. Pousada da Esperança, Bauru (SP) – 2000.

IMPORTANCE OF VACCINE	n	%
To prevent diseases	45	95.8
Others	02	4.2
TOTAL	47	100

In what regards reasons for delay in vaccination, 16% of the interviewed indicated forgetfulness as cause for children non-vaccination; 12% claimed illness of children and bad working hours of the health unit and 8% reported that the distance was the reason for the delay. However, the inconsistency of the alledged reasons for the

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default to vaccine is made clear by the enormous variety of reasons: 52% in "other reasons". Such item seems fortuitous and incoherent compared to the awareness demonstrated towards the importance of vaccines in preventing diseases, probably due to the excluding social condition these families live in, in which health is not the main concern (TABLE 6).

TABLE 6– Distribution of absentees according the opinion on the reasons for delay, Pousada da Esperança, Bauru (SP) - 2000.

REASONS FOR DELAY	n	%
Forget	4	16.0
Children's illnesses	3	12.0
Health unit working hours	3	12.0
Distance health unit - home	2	8.0
Others	13	52.0
TOTAL	25	100

In TABLE 7, while facing the opinion of the interviewed with that of the real vaccination status, it can be seen that there is strong positive association between both, that is, interviewed individuals revealed a high degree of awareness on the importance of vaccinal status of their children, 82%. In the calculation of the predictive positive (Proportion of sick patients who tested positive (PEREIRA, 1995). Conect classification $(a + d)/n = (25 + 7)/39$. Positive predictive value = $a/(a+b) = 25/31$) value of totaling opinion of the interviewed, considering the card notes as the reliable source, it is obtained 80.6% , that is, for each 100 positive answers, 81 are true.

TABLE 7 – Distribution of absentees according the opinion on vaccination status and the real status. Pousada da Esperança, Bauru (SP) – 2000.

Opinion of the interviewed	REAL STATUS		
	Updated	Delayed	TOTAL*
Updated	25	6	31
Delayed	1	7	8
TOTAL	26	13	39

* Excluded 5, whose vaccination cards were not verified and 3 that did not opine.

FIGURE 3 depicts the comparison between the opinion of the interviewed on the vaccination status and the real status found on the records.

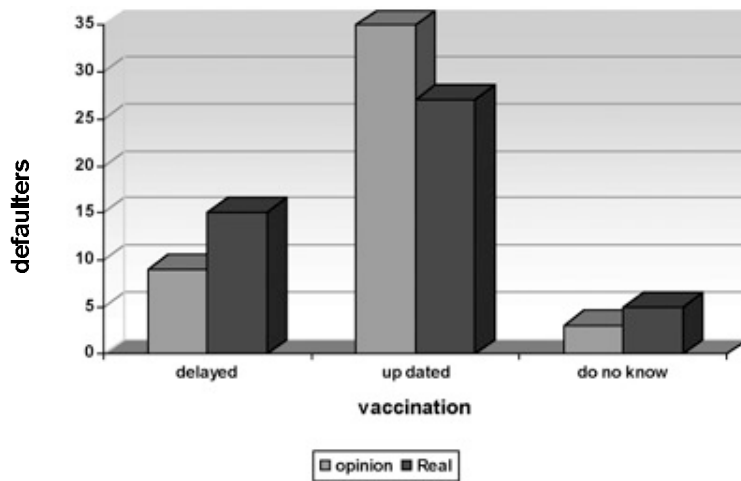


FIGURE 3 – Comparison of the opinion of the interviewed and the real vaccin status of the children.

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It was observed that 64.3% out of the 47 children considered as absentees to vaccination, were actually in a regular status due to vaccination in another health unit or even in their own health unit, although not recorded in the register. It is important to say that, although the missing children had been considered as casual in what regard sex and age, it can be suspected that, due to the poor economical condition of families, they were forced to migrate and this research had to leave behind proportionally more children with delayed vaccination, which smoothed the results. The adverse social reality of these children's families could be the explanation for the missing cases, revealing an intense migratory process of the families living in the neighborhood.

This supposition does not invalidate the data obtained according to which the low levels income and education, reported in many studies as cause of non-vaccination, did not appear as such, that is, even in a proved poverty condition and poor education of parents, the numbers obtained indicated that 64.3% of children were in a regular status of vaccination.

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