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ePoster Viewing
Vaccine development

KNOWLEDGE AND RISK PERCEPTION OF MEASLES AND FACTORS ASSOCIATED WITH VACCINATION DECISIONS IN SUBJECTS CONSULTING UNIVERSITY AFFILIATED PUBLIC HOSPITALS AFTER MEASLES INFECTION: A RETROSPECTIVE EPIDEMIOLOGICAL STUDY

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Study design: Retrospective epidemiological study

Objectives: The main objectives were i) to assess knowledge of the study population on measles and its consequences for patients and their families; ii) to evaluate measles vaccination awareness and practices; and iii) to gauge potential changes in opinion with regard to measles vaccination after disease onset.

Methods

Setting: Adults and parents of children consulting 1 of 4 university-affiliated public hospitals in Lyon, France between January 1, 2010 and September 2012 because of measles infection.

Data collection: Identification of measles cases was based on laboratory data. Information on demographic variable, the extent of knowledge of measles, its mode of transmission, associated risks and consequences for patients and their families was obtained by using a questionnaire-based, structured telephone interview.

Statistics: Study population characteristics were defined by descriptive analysis. Logistic regression analysis was performed to assess factors influencing changes in opinion on measles vaccination after measles infection. The strength of the association was based on crude and adjusted odds ratios (OR) and 95% confidence interval (95% CI).

Results

Participants: Of the 473 measles cases diagnosed between 2010 and 2012, 148 accepted to participate, giving a response rate of 31.29%. Children less than 18 years of age accounted for 58% of the study population.

Main results: Overall, 73.64% of patients were not vaccinated or partially vaccinated. Opposition to vaccination 'in principle' was the third reason for non-vaccination. Only 30.2% of parents and 12.8% of adults considered measles to be potentially 'serious' before disease onset and a large majority were unaware of its complications. In total 26.7% of parents and 43.5% of adult cases confirmed that their opinion regarding vaccination became more positive after measles infection. These percentages rose to 30% and 48.8% respectively in subjects who had perceived the disease as being 'severe'. Among parents of infected children, knowledge of transmission mode (odds ratio (OR) =5.9; 95% confidence interval (95% CI): 1.64-21.26), perceived severity of measles (OR=1.5; 95% CI: 1.06-2.13) and absence of hepatitis B vaccination (OR=0.17; 95% CI: 0.04-0.65) were independently associated with a more positive opinion about measles vaccination after disease onset. In adult patients, low education level (OR=3.39; 95% CI: 1.03–11.11) and lack of knowledge of sequelae (OR=10.19; 95% CI: 1.14-91.31) were linked with a more positive opinion.

Conclusions: These findings suggest the need to organize information and prevention campaigns in at-risk populations. Individuals affected by vaccine-preventable diseases are interesting populations to study disease impact on vaccine perception.