Impact of a Six-Month Telephone Educational Program on Health Status of Asthmatic Patients Discharged From The Emergency Department After Acute Exacerbation.

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Background:

Treatment of acute asthma attacks is well codified in the Emergency Department (ED). The admission rate is lower than 50% in most cases. However, short-term relapse remains elevated with avoidable factors such as absence of written recommendations at discharge, limited follow-up by a General Practitioner (GP) or a Pulmonologist. The Emergency Physician (EP) has a responsibility in inducing education of the patient after discharge. We hypothesized that a phone coaching by an educational nurse would enhance the follow-up of such patients and reduce the risk of relapse.



Patients & Methods:

Twenty eight hospitals took part in this national, prospective, multicenter study, approved by the Ethics Committee, with a pair of coordinators (EP and Pulmonologist) in each of them. Inclusion criteria: adult asthmatic patients discharged from ED after treatment of an acute exacerbation and who gave a written informed consent to be called back by an educational nurse at Day 1, Day 15, Months 1, 3 and 6. Regarding their asthma, educational advice (according to Global Initiative for Asthma [GINA] guidelines) was given to the patients together with a proposal of an early post-discharge consult by an in-hospital Pulmonologist for those who did not have any referring doctor. Relapse, asthma control, observance, consultation of EP or pulmonologist, satisfaction rates were also collected.

Results & discussion:

From September 2016 to June 2017, 320 patients (median age: 33 years old, 68% female) were included. Before their admission to the ED, 90% had a previous follow-up by a GP, but only 34% by a pulmonologist. Only 18% had a personalized action plan.

Most ED did not have neither a written protocol on management of asthmatic patients after discharge, nor standardized order.

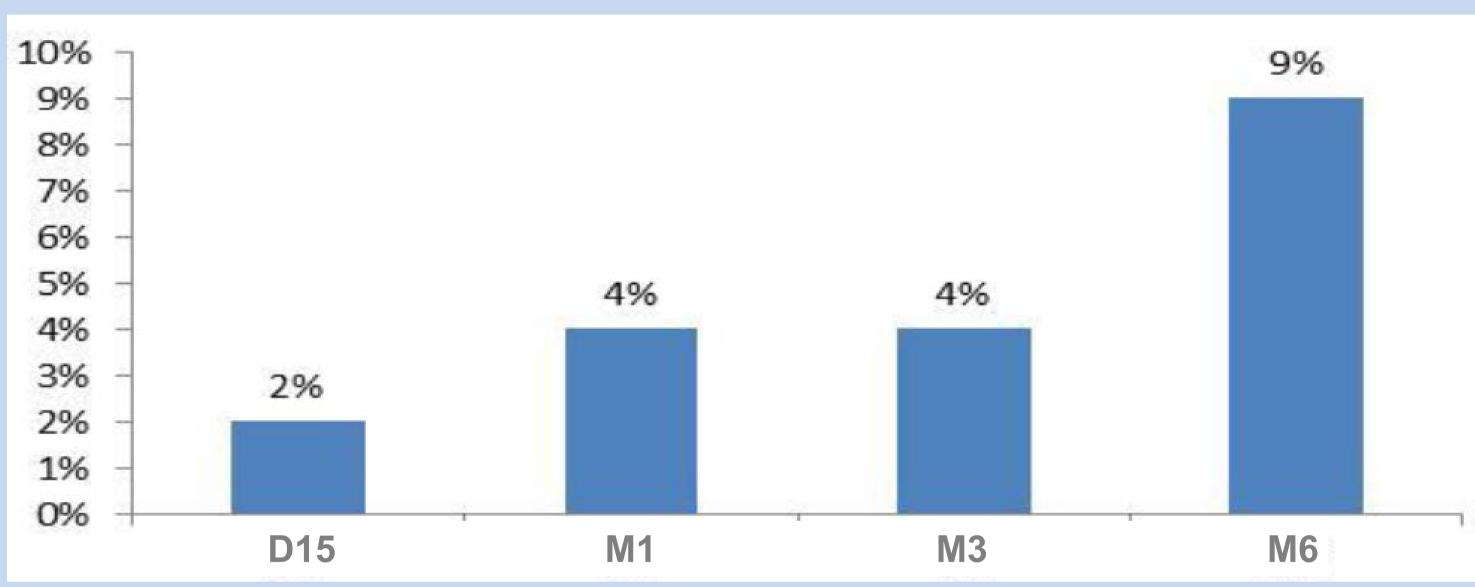


Figure 1: ED readmission rates after ED consult (D: Day; M: Month)

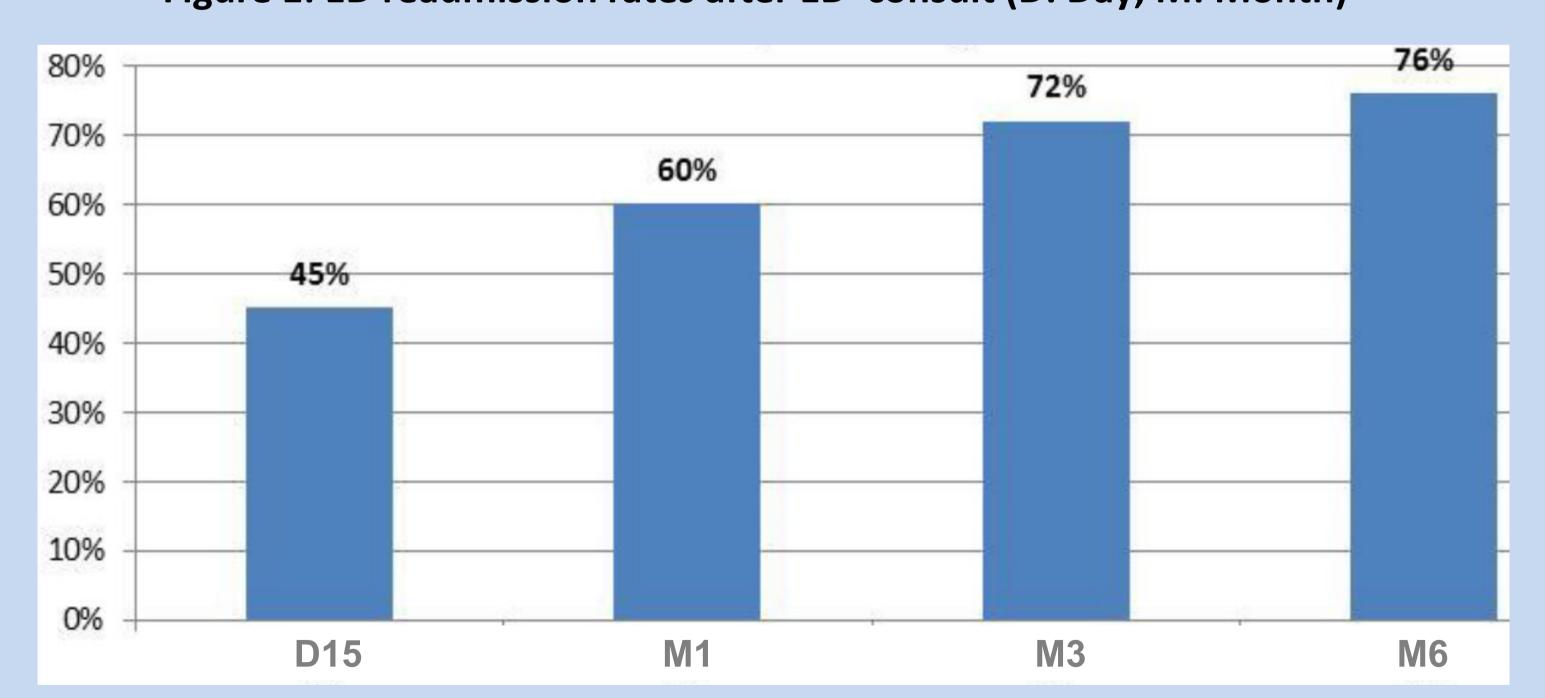


Figure 2: Pulmonologist or GP consultation rates after ED consult (D: Day; M: Month)

After 6 months, 71% have visited a Pulmonologist, 68% improved their symptoms, 79% had a better treatment compliance, 77% felt that the phone call has improved their follow-up. 99% were satisfied with the personalized support of the nurse.

At the end of the program, 17 hospitals out of 28 proposed such an outpatient visit. Eleven new care sectors have been created

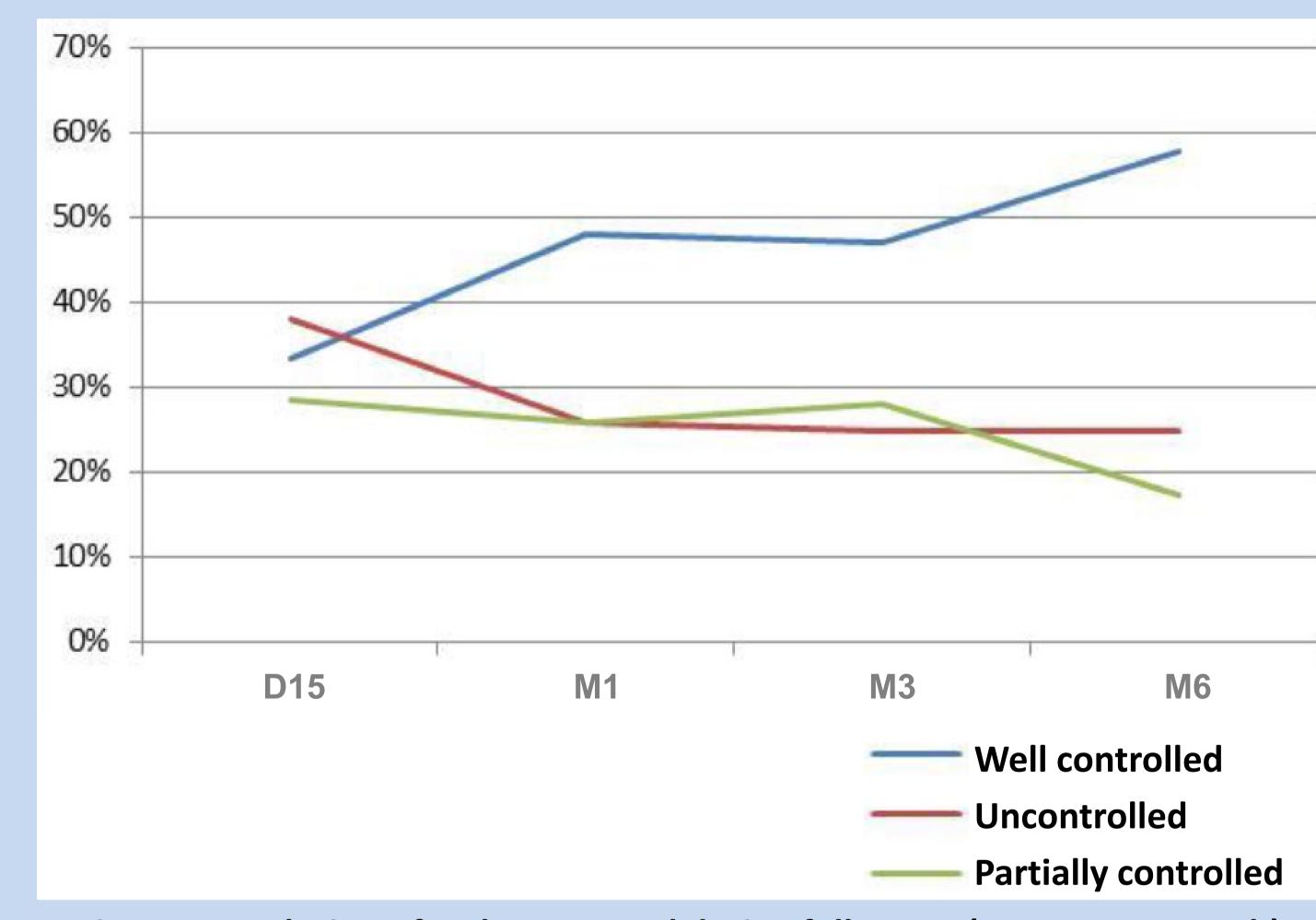


Figure 3: Evolution of asthma control during follow-up (D: Day; M: Month)

Conclusion & perspectives:

In this series of 320 asthmatic patients who received a total of five phone calls as follow-up within 6 months after their discharge from the Emergency Department secondary to acute exacerbation, the relapse rate was less than 10% at M6, with a 75% consultation rate by a general practitioner / pulmonologist and a significant satisfaction with this telephone follow-up. It confirms the importance of the Emergency Physician as first link in the chain of follow-up for these kind of patients and as active actor in the creation of a network regrouping Emergency Departments, GPs and Pulmonologists, in order to improve health status and outcome.