Pregnant women in ED : a new specific triage algorithm

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INTRODUCTION

Pregnant women is a particular category of patients admitted in ED with always the same question: To who adress them first after admission? To emergency physician, to a gynecologist or to a midwife?

In the ED of university of Liège, we created a triage algorithm for pregnant women with the following objectives:

-Detection of vital emergencies

-Referral of patients to the appropriate flowcare and within the correct delay

-Optimization of resources

The aim of the present work is to demonstrate the efficacity of our algorithm.

MATERIAL AND METHODS

This is a prospective randomized controlled non-interventional clinical study.

Our algorithm was developed on the ELISA model.

2 cohorts were recruited:

-Control group:291 pregnant patients who followed a classic flowcare;

-Triage group:278 patients for whom the triage algorithm was applied.

For each patient, we analyzed the classification, the ressources and if she needs hospitalization.

For the triage group, we compared the practical triage(Triage level by the triage nurse) with the theoretical triage(Triage level following strictly the algorithm) in order to detect errors. We also verified if the destination was right.

RESULTS

Overall, the error triage rate is 40.6%. However, the majority of patients(95%) were sent to the right people.

Looking at stakeholders, the proportion of patients who saw a midwife was significantly higher in the control group.

More patients were referred directly to the gynecologist in the triage group, but not significantly.

Concerning diagnostic means, the only significant difference is found in the other means of diagnosis(Fetal monitoring, Promtest…), which were used more in the control group.

Hospitalization rate is identical in both groups. Only level 1 to 3 emergencies were hospitalized.

DISCUSSION

We managed to set up this algorithm and apply it for three months with results that meet our expectations.

In 60% of cases, the patient was classified with the right level. In 95% of cases, it was oriented to the right caregiver, especially when the triage level was correct. We used less resources, while having the same hospitalization rate.

Our ranking has been shown to be a predictor of hospitalization for high emergency levels.

The error rate is partly explained by a lack of training of nurses in sorting obstetric pathology and using the algorithm.

CONCLUSION

In conclusion, the tool we propose offers interesting prospects for improvement for the organization of obstetric emergencies.

There are still areas to improve, mainly its utilization rate and its rigorous application. This will be done at the cost of repeated training with the staff concerned to make them aware of the optimal management of obstetric emergencies.