

# SmartMama: Enhancing Women's Experience with Pregnancy

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## ABSTRACT

Pregnancy is a nonpareil experience which offers unique emotions, but which also involves the onset of doubts and fears. We intend to present a project whose aim is to build a path characterized by not just a gynecologist-patient relationship but a support and empathy-based relationship, through a multifunctional system. The system is provided by a management tool for the gynecologist and an app for the patients and the midwives. This project is born with the only purpose of simplifying the direct relationship between the patient and the specialist.

## Keywords

app, software system, gynaecologist, patient, midwife

## 1. INTRODUCTION

To inquire into the peculiarities of pregnancy process we have proposed a poll to 16 women, who are living the best phase of their lives, and to 12 doctors to understand how to improve with a software system their daily administration.

Analysing the results, it emerged that a woman needs physical and emotional support during the nine months. In the whole period of time they are always in search for information.

Another relevant aspect is that the patient has to constantly undergo to a whole series of gynaecological exams to control the entire pregnancy process. On the other hand, the gynecologist needs to have the single patient's history under control. All this information is often collected in paper documents that cannot be lost. Conversely, midwives are not too much considered although they could be a true emotional and physical support for a pregnant woman. For the previously stated reasons, we commit ourselves to the creation of the following research tools.

## 2. SMARTMAMA

SmartMama has been conceived as a unique interactive Platform destined to support three different categories of subjects, such as gynecologists, midwives and pregnant women.

In particular, during pregnancy a woman can have a real-time communication with her gynaecologist and, through a forum, she can also chat with other mums. In addition, she has the possibility to search for a midwife as geographically near as possible, to ask for advices or to clarify some doubts in a dedicated chat. There also is a section to simplify the search for sport activities for pregnant women.

Every patient has her own personal profile where the results of every checkup are trimestral organized. In the end, there is an emergency section to inform the doctor of an alarming situation.

For the gynecologist, a management tool to keep under control the results of every checkup are provided. For the midwives we thought about an app finalized to the promotion of their proposals and the valorization of their professional features.

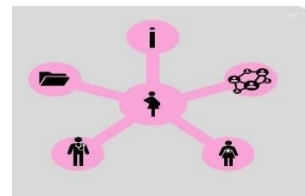


Figure 1

## ADVANTAGES OF SMARTMAMA

Starting from a study of applications already in store, we noticed that none of them offers the services we propose. The largest part of applications permits to have truck of the ultrasound of the patient just taking a picture of the report that then the patient has to load on her profile.

Smart Mama, instead, has a dedicated area in which the doctor charges data related to the check-up, directly on the profile of the pregnant woman. In addition, no app has a chat that permits the direct communication between the different stakeholders and a forum to make every mum interact with each other. Finally, we have the search for the nearest midwife, which is an additional tool that also highlights the professional figure of the midwife itself.

## 2. FUTURE PLANS

Recent studies had demonstrated that music affects the physical, intellectual and emotional development of babies and children and that improves the cognitive and sensorial development. Furthermore, these studies also demonstrated that children exposed to classical music in the uterus show a positive change in the physical and cognitive development after born.

This is the reason why we are projecting to improve the system with experimental earphones to be utilised to play with the emotions of the foetus.

Per questo motivo, stiamo progettando di migliorare il sistema con auricolari sperimentali da utilizzare per "giocare" con le emozioni del feto.

## REFERENCES

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