

Qualitative study undertaken in a single center in UAE evaluating the impact of information on fetal movements provided to pregnant women

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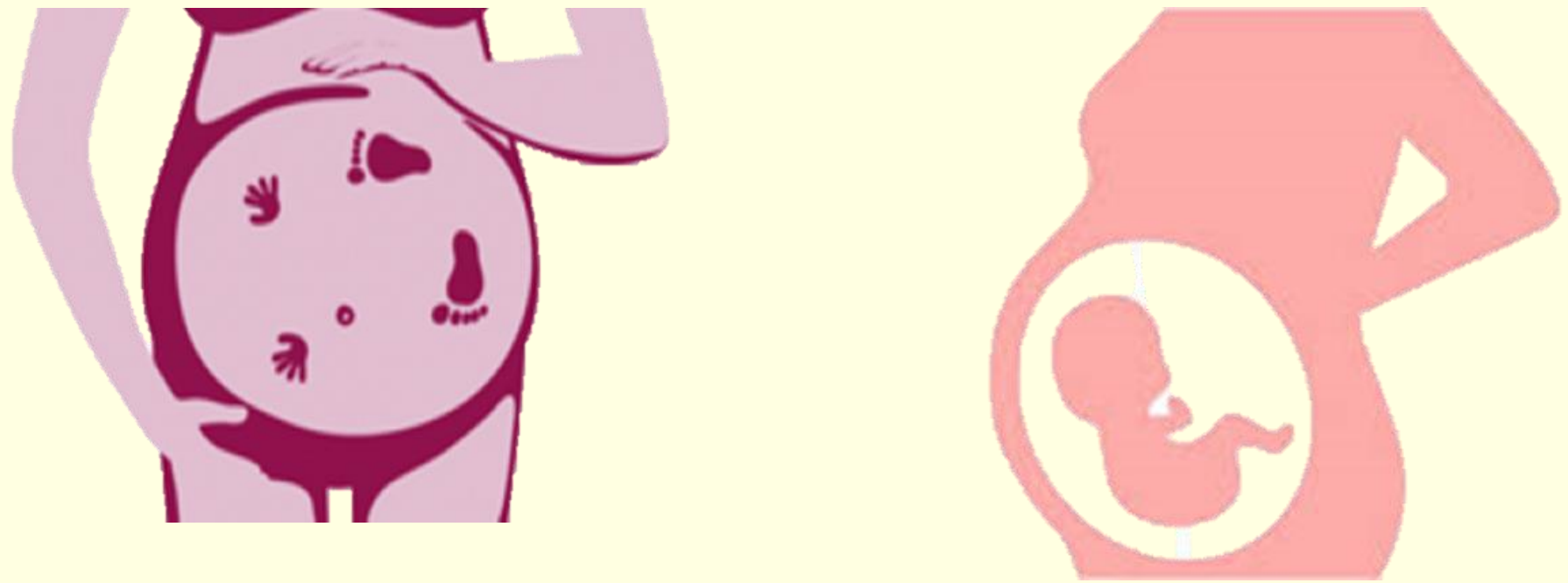


Background

Reduced fetal movement can be regarded as an important symptom of fetal compromise. During pregnancy, maternal perception of fetal movements is one of the first signs of fetal life and is regarded as a manifestation of fetal well-being ⁽¹⁾. As such a significant reduction or sudden alteration in fetal movements is a potentially important clinical sign and therefore, a cause for concern for both the mother and obstetrician ⁽²⁾.

Furthermore, reduced fetal movement is affiliated with potentially poor perinatal outcomes, due to its association with a variety of pregnancy complications, including oligohydramnios, neuromuscular abnormalities, brain injuries, small for gestational age fetuses (SGA), fetal growth restriction (FGR), and stillbirth ⁽³⁾. Studies have shown that in stillbirths present with reduced fetal movements, placental insufficiency is existing alongside ⁽³⁾. Therefore, reduced fetal movement is thought of as a fetal adaptive mechanism to reduce oxygen or nutrient consumption by conserving energy due to chronic hypoxia ⁽³⁾.

Delayed presentation of reduced fetal movements reporting by mothers have been highlighted as a corresponding factor to avoidable stillbirths in many reviews ^(4,5). It is a common complaint encountered across most maternity units.



Aim

- This qualitative study aims to study women's understanding of the information provided to them on fetal movements in pregnancy and when and how to access the health service if altered fetal movements encountered.
- To review the information given to the pregnant women regarding awareness of fetal movement and to improve their understanding. To make the maternity units more proactive in counselling about the same when faced with these situations and to manage these patients according to the guidelines.

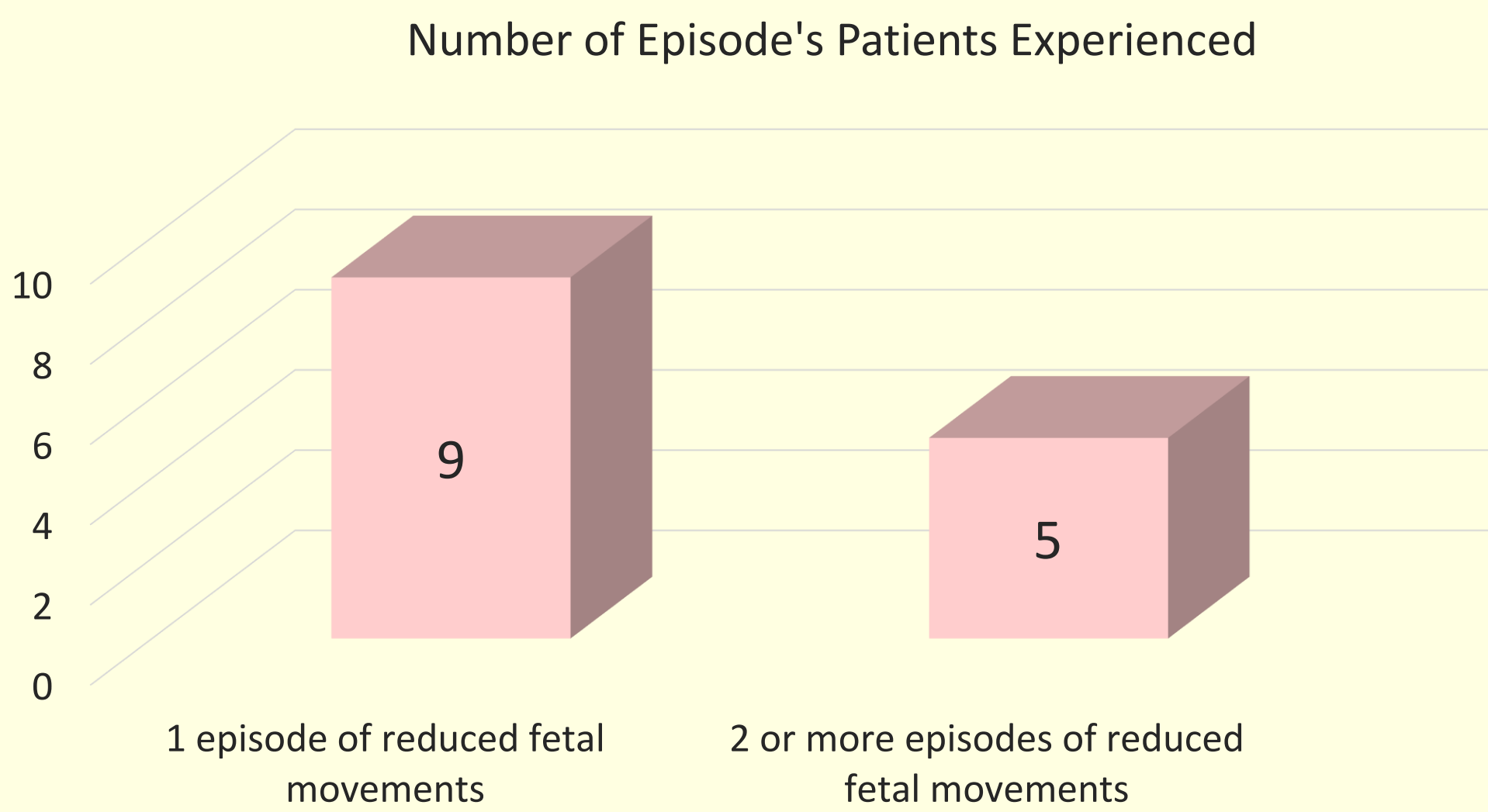
Method

It is a qualitative study in which a survey was conducted with questionnaires related to fetal movement awareness. The questionnaires were given to 100 pregnant women who were more than 26 weeks of gestation attending obstetrics and gynecology outpatient clinic in Mediclinic Al Noor Hospital, Abu Dhabi. The feedbacks were collected and data was analyzed to review the quality of information given, women's understanding of the information, factors leading to the non-reporting of the reduced fetal movements and the risk factors that are linked with higher perinatal morbidity and mortality.

Discussion and Results

Maternal perception of reduced fetal movements affects up to 15% of pregnancies ⁽⁶⁾. Multiple pathologies contribute to reduce fetal movements but in many pregnancies a cause is not found ⁽⁶⁾.

In our study population, a total of **14 women out of 100** reported reduced fetal movements of which 9 women (64%) had only 1 episode and 5 patients (36%) had 2 or more episodes of reduced fetal movements.



We further analyzed our data, to understand the various actions they took when faced with the situation of reduced fetal movements. It was noted that;

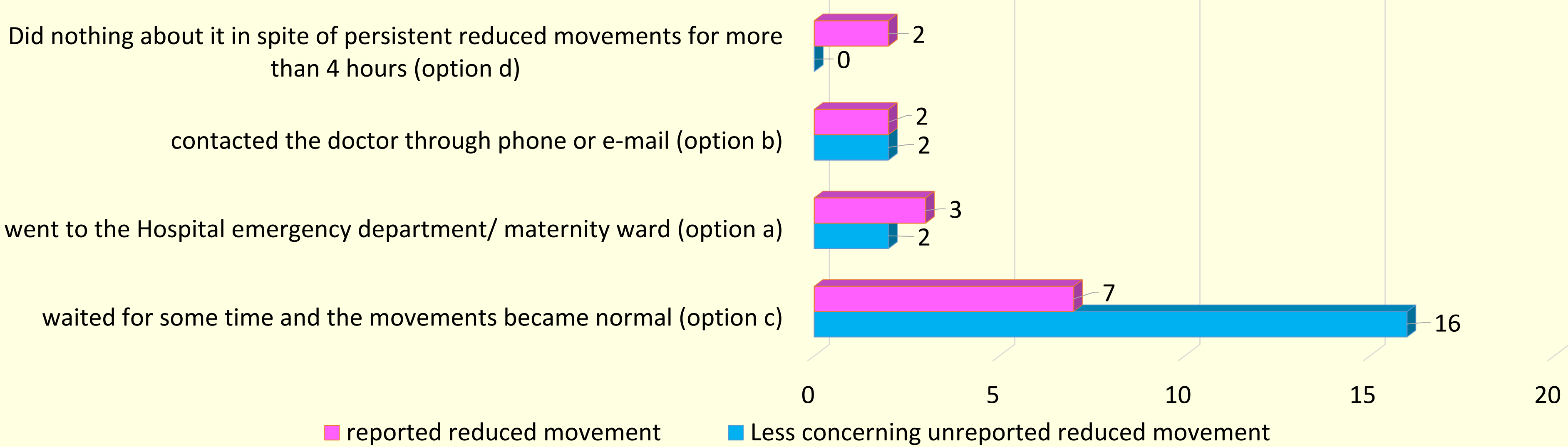
- 7 out of 14 (50%) chose option 'c'** to wait and were reassured by a normal fetal movement in some time.
- 3 of them (21%) chose option 'a'**- went to the Hospital emergency department/ maternity ward.
- 2 of them (14%) chose option b'**-contacted the doctor through phone or e-mail
- Only 2 out of 14 (14%) chose option 'd'**- to do nothing about it in spite of persistent reduced movements for more than 4 hours.

While examining the reasons why they chose option "d" as mentioned above, we found that; one patient was busy with household chores and could not come to hospital while the other patient ignored it and thought it is normal.

Another **20 patients** had episodes of less fetal movements but did not perceive it serious enough to be reported on the questionnaire.

- 16 of them (80%) just waited for some time and the movements improved so they did not reach the medical facility. **Option c**
- 2 of them (10%) opted for reaching their physicians through e-mail or phone call **Option b**
- 2 of them (10%) went to the hospital ER/maternity ward. **Option a**

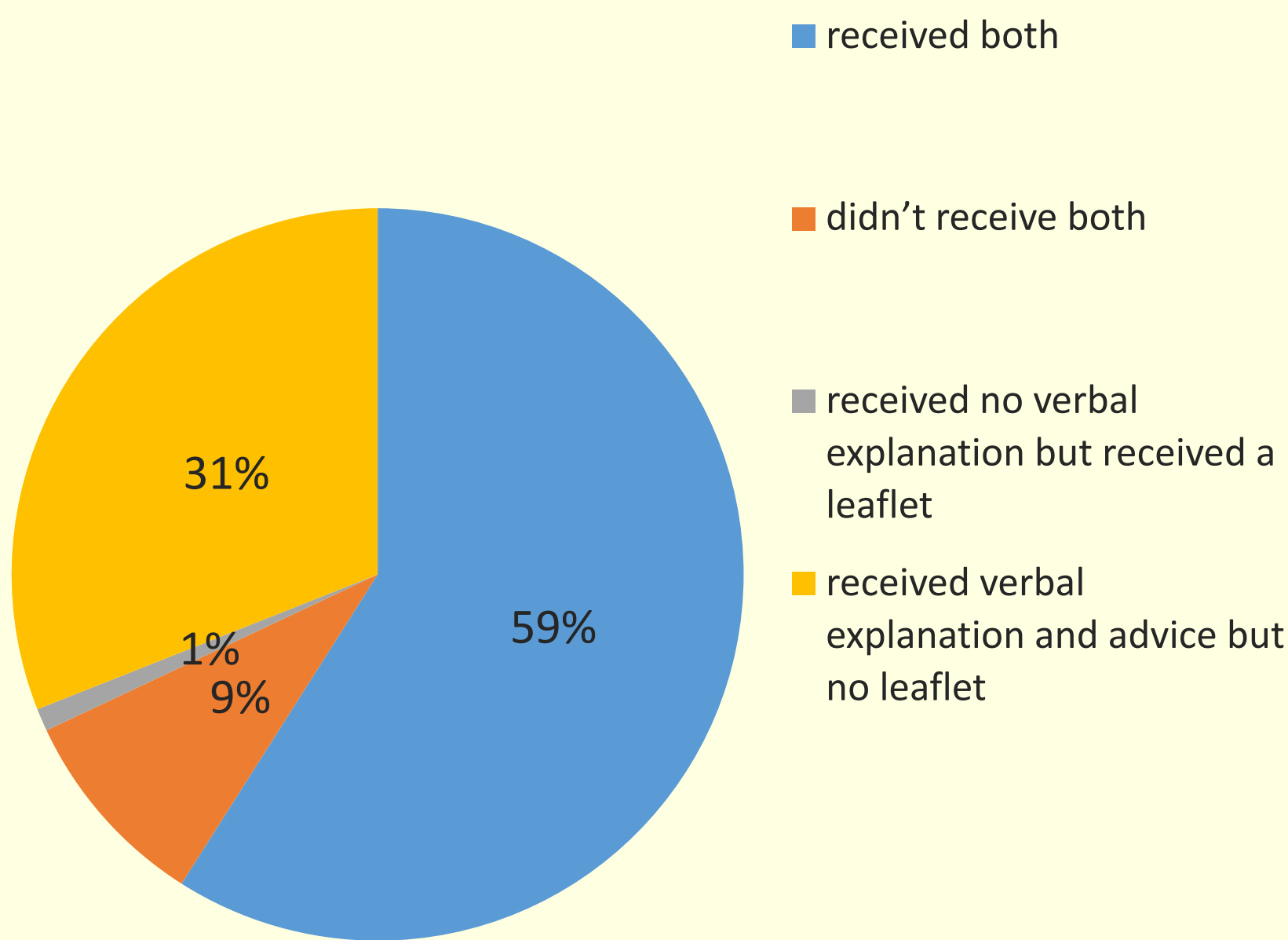
Analysing the actions taken by the patients



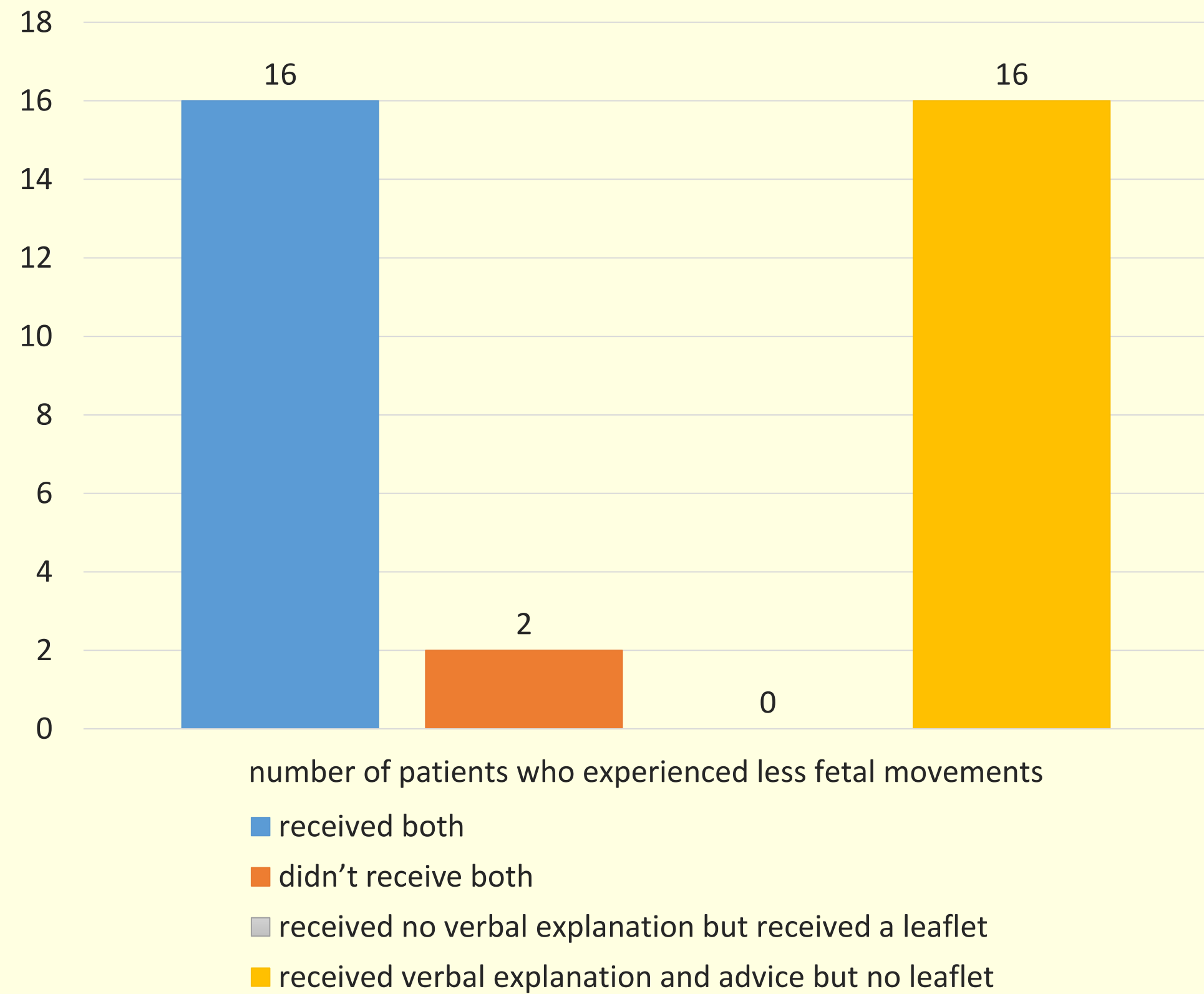
On analyzing the type of information and education received by the pregnant women attending the outpatient clinic, it was noted that 91 % of the women received information, either verbal or leaflets or even both. 32 out of those 91 patients (35%) reported reduced fetal movements and took the right steps as they were well informed and aware with the situation.

It was also noted that the 2 patients who chose option 'd' and decided to do nothing in spite of reduced fetal movements for 4 hours had a history of low-birth-weight babies and were actually provided with some form of information-one of them received both verbal and leaflet information and the other received only verbal education. The reason for the non-reporting was already discussed above.

Distribution of type of information given to the women



Patients who experienced less fetal movements in accordance to the information the patient received

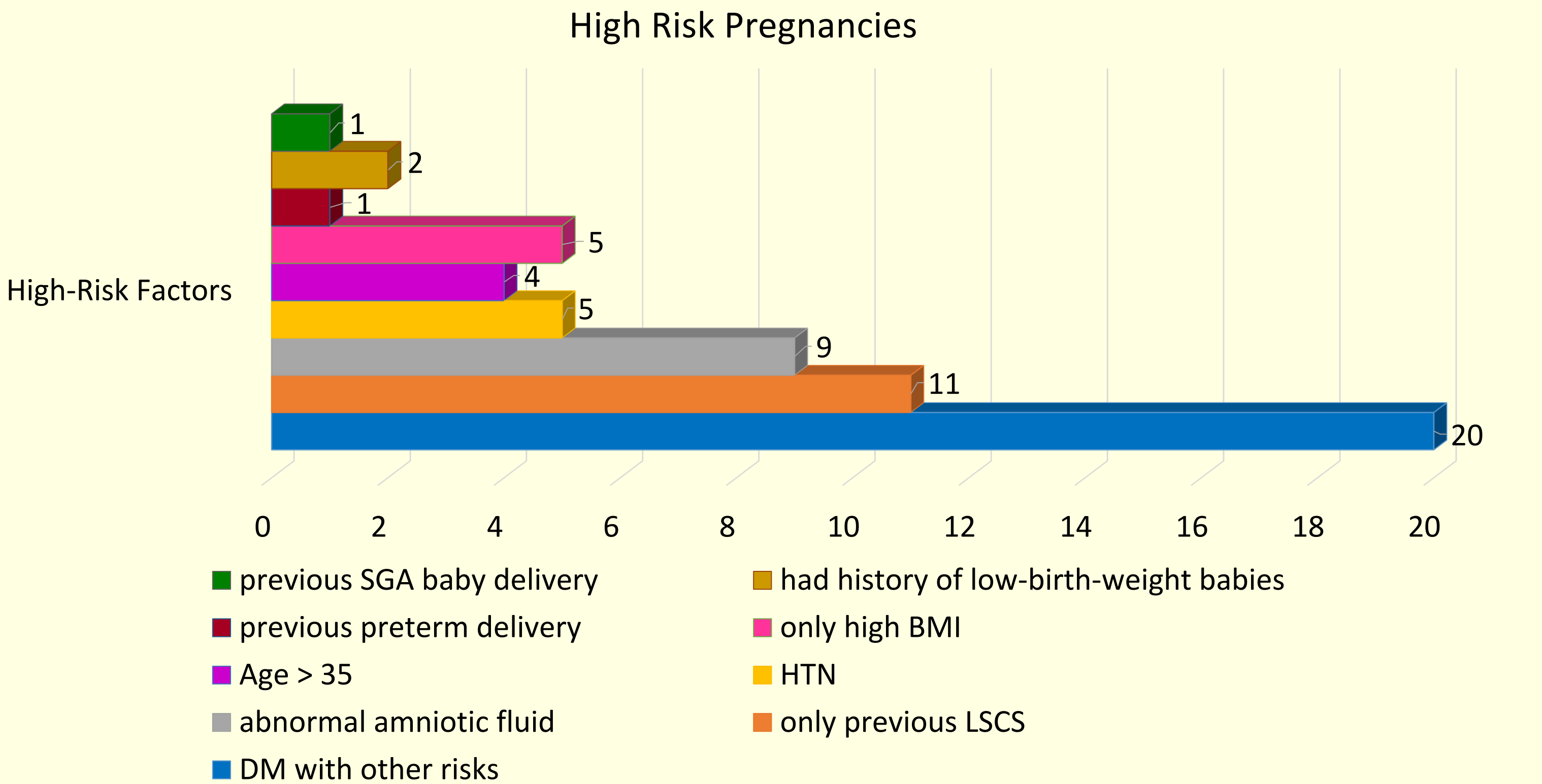
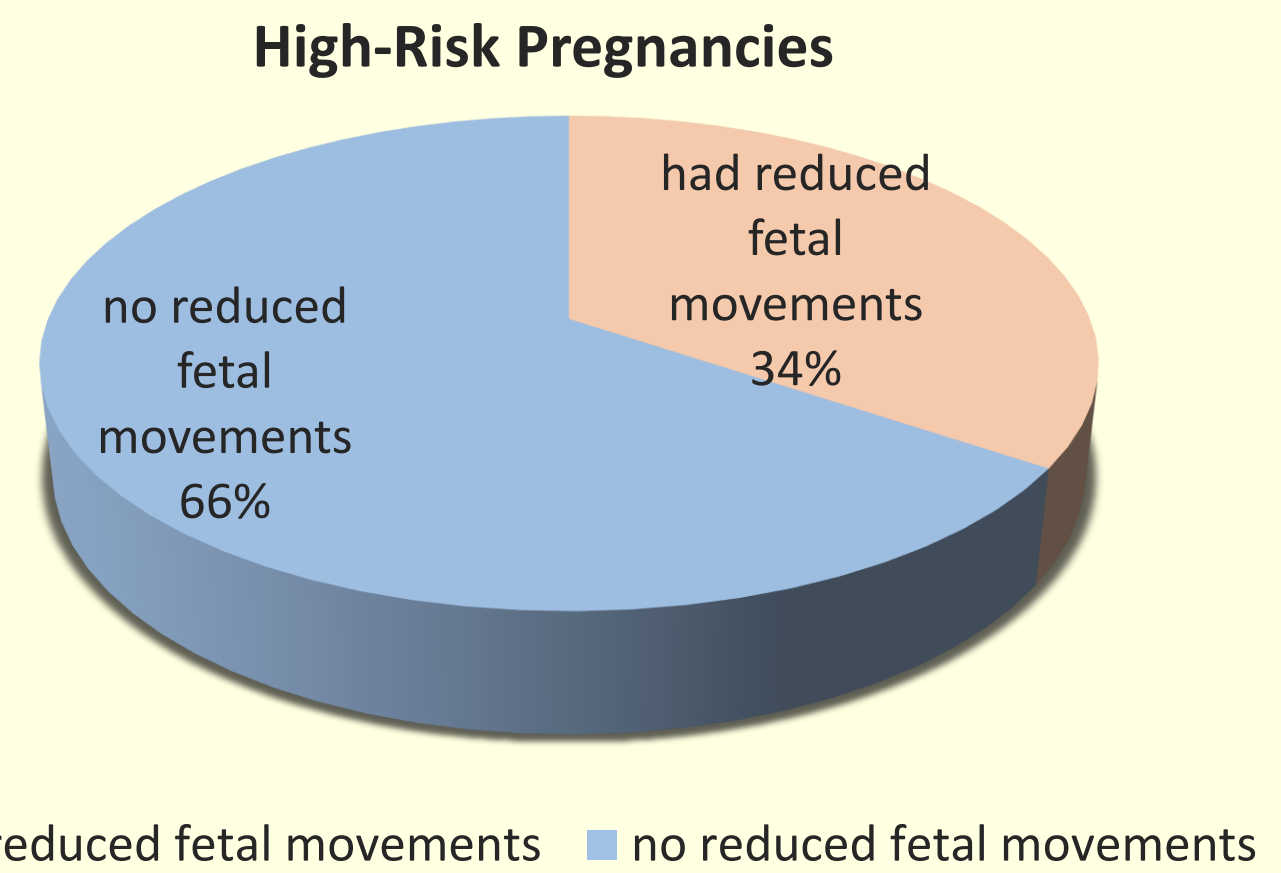


High Risk factors of pregnancy and reduced fetal movements

The number of high-risk pregnancies among our patient sample were 58 cases, 20 (34%) of whom experienced reduced fetal movements.

The high-risk factors were divided into various categories':

- DM and included multifactorial patients (multiple risks alongside DM)
- only had previous LSCS as a risk
- abnormal amniotic fluid, of which some had multiple risks
- HTN
- >35 years old of age
- only had high BMI as a risk
- previous preterm delivery at 35 weeks as a risk
- previous SGA baby delivery as a risk
- histories of low-birth-weight babies



Results and conclusions

- Out of 100 women, 14 reported reduced fetal movements which concerned them. 35% of the women were reassured when contacted the health services and that the action taken by the medical team was appropriate and timely.
- Further 20 women had reduced fetal movements but did not perceive it serious enough to be reported on the questionnaire as for the most, the movements improved after a while.
- In our study, no adverse outcome was reported related to the reduced fetal movements.
- The questionnaire itself could be considered as a source of awareness to the women.
- Continuous education and training of staff and use of internationally approved terminology on reduced fetal movements education leaflet.
- Empowerment and education of women to access health services when needed are some of the key recommendations from the study.
- The use of social media as a tool to spread awareness could be extremely beneficial to raise awareness.

References

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