

INTRODUCTION

The PIPA-UFRJ project is a birth cohort study developed in the city of Rio de Janeiro, Brazil, that follows children from pregnancy to 4 years old, to assess the effects of environmental pollutants on fetal and childhood development. One of the challenges of a cohort study is the retention of participants toward longitudinal follow-up. This work describes the **planning and execution of the strategies used for retention** in this cohort; and the results throughout the study's progress.

BACKGROUND

The study population was all babies born at UFRJ Maternity School whose mothers were > 16 years old and who lived in Rio de Janeiro, from June 2021 to July 2022. 901 pregnant women and 844 newborn were recruited.

Population characteristics	Pregnancy women - 858
Mother Age (Years)	29 DP 6,92 (16 – 46)
Race/ Ethnicity	74,3% No white (639)
Schooling (Years)	75,8 % (651) < 12 years
Lived in low-income communities	53,4% (459)
Governmental financial aid ("Bolsa Família")	22% (190)
Work activity	52,9 (454)

BABIES	
Male	- 48,6% (415)
Prematurity	- 13,8% (113)
Low birth weight	- 12,9% (106)

The Community engagement - Strategies

The ConPIPA, the family council, is one of strategies for the community engagement. It was created to guarantee a formal space of consulting evaluation of the project and the proposal of strategies. Regular meetings are focused on collaborative actions and on building trust between researchers and the participants. At every moment of the follow-up, the strategies are renewed, including the content of the health educational material produced and the gifts for the families.



Figure 1: 2nd PIPA's Council meeting



Figure 2: 1st PIPA's Council meeting



Figure 3: 3rd PIPA's Council meeting



Figure 4: 1st PIPA's Council meeting

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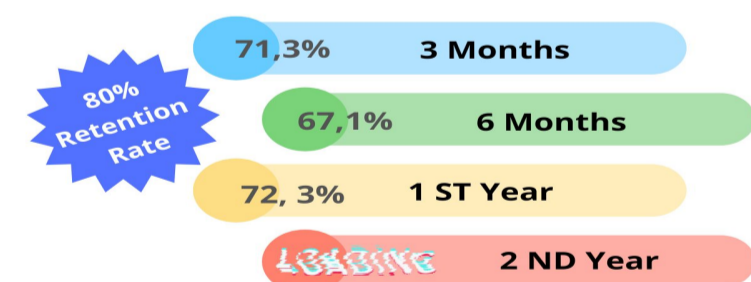
The Recruitment and Retention Strategies at different moments of the follow-up (Figure 1)



RESULTS

- 86% (699) of the 808 babies returned at least one of the following periods (3rd, 6th, or 1st year),
- 55% (442) returned at the three moments
- The geographic localization and social vulnerabilities have to be consider to define the strategies of retention. At each moment of the follow up, the strategies are evaluate.

Figure 5: The retention rate at every moment of the follow-up



CONCLUSION

One of the challenges of the researchers is to maintain the families' participation in the study. The study has a good retention rate of >80% and retention of >86% at the end of the 1st year of follow-up. The strategies are evaluated at each moment of the follow up to improving the quality of the data and to engage the participants, the community engagement has to be an ongoing process and depends on the characterization of the population, like culture and lifestyle.



Figure 6 : Family with the Food Support