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for longer acting methods and emergency contraceptive pills. Condom use, the most commonly used birth control method had 89% agreement (Kappa 0.60, 95% CI 0.15–1.00) with ever use, and only 33% agreement (Kappa 0.08, 95% CI –0.17–0.33) when asked to recall dates of use. Combined hormonal pills had 84% agreement (Kappa 0.63, 95% CI 0.21–1.00) with ever use, and only 50% agreement (Kappa 0.23, 95% CI –0.13–0.58) when asked to recall dates of use. All respondents were either very certain or somewhat certain about the accuracy of their responses when the survey was administered, compared to only 16 (of 19) when the respondents took the online survey alone (Kappa 0.28, 95% CI 0.05–0.61).

Conclusion: When a research assistant administered the survey questions, recall of past contraceptive use was more complete, and respondents reported feeling more certain about the accuracy of their responses. We recommend including an interview in a subset of study participants to improve data quality and allow imputing of missing data in the non-interviewed participants.

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COVID-19 pandemic restrictions have long-term impact on physical activity in adults with cystic fibrosis

T. Radtke¹, S. Haile¹, H. Dressel², C. Bendin³. ¹Epidemiology, Biostatistics and Prevention Institute, University of Zurich, Zurich, Switzerland; ²Internal Medicine, University Hospital Zurich, Zurich, Switzerland; ³Medical Faculty, University of Zurich, Zurich, Switzerland

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Does NICU hospitalization predispose to earlier lung colonization by *Pseudomonas aeruginosa* and MRSA in cystic fibrosis patients identified by newborn screen?

L. Faniyi¹, H. McLauchlan², Y. Wang³, N. Kherallah⁴. ¹Department of Pediatrics, University of Illinois College of Medicine/OSF St. Francis Children Hospital of Illinois, Peoria, USA; ²Pediatrics, Children's Hospital of IL/OSF St Francis Medical Center, Peoria, USA; ³Medicine, University of Illinois College of Medicine at Peoria, Peoria, USA; ⁴Pediatrics, Peyton Manning Children's Hospital, Indianapolis, USA

Background: Earlier colonization with *Pseudomonas aeruginosa* and methicillin-resistant *Staphylococcus aureus* (MRSA) is associated with adverse health outcomes in patients with cystic fibrosis (CF). In 2013, the Cystic Fibrosis Foundation (CFF) updated their infection prevention protocols to include contact and droplet precautions for CF patients receiving care in health care settings. However, these recommendations are difficult to implement in the NICU when a CF diagnosis is not yet known. With the difficulty of implementing CFF protocols in the NICU, we hypothesized that NICU patients were predisposed to lung colonization by *P. aeruginosa* and MRSA. This study sought to determine if CF patients who were admitted to the NICU as newborns go on to grow sputum cultures positive for *P. aeruginosa* or MRSA earlier than CF patients with no NICU admission.

Methods: A retrospective chart review was carried out on CF patients (n = 40) diagnosed with newborn screening. The patients were sorted into 2 groups: group A (n = 13) were patients with a history of NICU admission and group B (n = 27) were patients without a history of NICU admission. The primary outcome measured was time (in months) to first positive sputum cultures of *P. aeruginosa* and MRSA. The duration of study was from birth until end of data collection (9/27/2020).

Results: The average age of patients in the group with NICU admission and the group without NICU admission was 4.8 ± 3.1 and 5.0 ± 3.6 , respectively. *P. aeruginosa*: At the conclusion of the data collection, 14 (51.9%) patients in group B already had a positive *P. aeruginosa* culture compared to 5 (38.5%) patients in group A. Using a Kaplan-Meier survival curve (Figure 1), 50% of patients in group A would have their first positive *P. aeruginosa* culture at the age of 82 months compared to 52 months in group B ($P = 0.6442$; Renyi test). Using the Cox regression analysis, the relative risk of having a positive *P. aeruginosa* culture for patients admitted to the NICU was 0.71[0.25,2.00] ($P = 0.5188$). MRSA: At the conclusion of data collection, 9 (33.3%) patients in group B already had a positive *P. aeruginosa* sputum culture compared with 3 (23.1%) patients in group A. Using a Kaplan-Meier survival curve, 25% of patients in group A would have their first positive MRSA sputum culture at the age 31 months compared with 77 months in group B (0.9134; Renyi test). Using the Cox regression analysis, the relative risk of having a positive MRSA for patients admitted in NICU was 0.92[0.24,3.52] ($P = 0.9066$).

Conclusion: Although our results were not statistically significant, the trend of the results is interesting. With the 2 groups having a similar mean age, the prevalence of positive cultures was lower in the patients admitted to the NICU for both *P. aeruginosa* and MRSA. For *P. aeruginosa*, the group with NICU admission had a longer median survival time without colonization compared to the group without NICU admission. With a history of NICU admission, the relative risks of lung colonization by either *P. aeruginosa* or MRSA were less than 1, although our confidence intervals shows that there could be no difference in risk. This trend does offer some hope to the statements that maybe NICU hospitalization does not predispose to earlier positive cultures of *P. aeruginosa* and MRSA. In fact, NICU hospitalization may be protective in delaying onset of *P. aeruginosa* and MRSA colonization in CF patients. To confirm these assumptions, this study needs to be carried out with a larger sample size.