**Supplementary file. Table 1. Reasons for consultations, children aged 6 months - 5 years at Dona Estefânia Hospital, PAMC, September 2023 – September 2024.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variables (N=222) | Categories | With or at risk of developing anemia (n=74) | | Without anemia (n=148) | | Total (N=222) | |
| **N** | **%** | **n** | **%** | **n** | **%** |
| Reason for consultation\* | **Anemia (all)** | 51 | 69.3 | 0 | 0.0 | 51 | 23.4 |
| Anemia | 34 | 45.9 | 0 | 0.0 | 34 | 15.3 |
| Anemia (diagnosed in the context of previous hospital admission for vomiting) | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Anemia and short stature for age | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Anemia and feeding difficulties | 3 | 4.1 | 0 | 0.0 | 3 | 1.4 |
| Anemia and poor weight gain | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Anemia and obesity | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Anemia and food selectivity | 3 | 4.1 | 0 | 0.0 | 3 | 1.4 |
| Anemia and suspected Goldenhar Syndrome | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Iron deficiency | 5 | 6.8 | 0 | 0.0 | 5 | 2.3 |
| Microcytosis | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| **Other reason (specific)** | 23 | 31.9 | 1 | 0.7 | 24 | 11.7 |
| Abdominal pain | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Colonial stenosis (sigma) | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Bowel failure | 3 | 4.1 | 0 | 0.0 | 3 | 1.4 |
| Fever with convulsions (resolved) | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Gastroschisis | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Poor weight gain | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Congenital malformation (esophageal atresia) | 2 | 2.7 | 0 | 0.0 | 2 | 0.9 |
| Congenital malformation (cloaca) | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Myelomeningocephaly | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Nephritis associated with vasculitis | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Neutropenia associated with influenza A | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Obesity | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Constipation | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Bowel obstruction | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Cerebral palsy | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Recurrent wheezing | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Down syndrome | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Caudal regression syndrome | 1 | 1.4 | 0 | 0.0 | 1 | 0.5 |
| Short bowel syndrome | 2 | 2.7 | 0 | 0.0 | 2 | 0.9 |
| Kenny-Caffey genetic syndrome | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
|  |  |  |  |  |  |  |
| **Miscellaneous (all)** | 0 | 0.0 | 147 | 101.0 | 147 | 69.1 |
| Miscellaneous: Poor weight gain, wheezing | 0 | 0.0 | 2 | 1.4 | 2 | 0,9 |
| Miscellaneous: Apnea, hepatitis, constipation | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Asthma, vasculitis, psychomotor developmental delay | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Developmental delay | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Developmental delay, spinal muscular atrophy, acute bronchiolitis | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Heart disease, Down syndrome, macrocephalic penis, | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Diarrhea | 0 | 0.0 | 1 | 0,7 | 1 | 0,5 |
| Miscellaneous: Abdominal pain, Down syndrome | 0 | 0.0 | 1 | 0,7 | 1 | 0,5 |
| Miscellaneous: Epileptic encephalopathy | 0 | 0.0 | 1 | 0,7 | 1 | 0,5 |
| Miscellaneous: Closure of fontanelle, constipation | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Enuresis | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Enuresis and wheezing | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Enuresis, asthma, torticollis, thelarche, developmental delay, obesity | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Enuresis, heart disease | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Enuresis, Urinary tract infections (UTI), diarrhea, jaundice | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Enuresis, constipation | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Enuresis, recurrent wheezing | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Excess hair, premature birth in routine sequence | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Fever, wheezing, poor weight gain | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Fever, Down syndrome, vomiting, poor weight gain | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Urinary tract infections, obstruction, eosinophilia | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Urinary tract infections (UTI), reassessment of neutropenia | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Laryngomalacia | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Poor weight gain, viral bronchiolitis | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Poor weight gain, diarrhea | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Poor weight gain, fontanelle closure, colon disease | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Poor weight gain and enuresis | 0 | 0.0 | 2 | 1.4 | 2 | 0.9 |
| Miscellaneous: Poor weight gain, enuresis, macrocephaly | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Poor weight gain, eosinophilia, macrocephaly | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Poor weight gain, epilepsy | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Poor weight gain, hypotonia, paroxysm | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Poor weight gain, pyelonephritis, feeding difficulties, wheezing, synostosis | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Macrocephaly | 0 | 0.0 | 1 | 0.7 | 1 | 0,5 |
| Miscellaneous: Congenital malformation | 0 | 0.0 | 1 | 0.7 | 1 | 0,5 |
| Miscellaneous: Obesity | 0 | 0.0 | 1 | 0.7 | 1 | 0,5 |
| Miscellaneous: Obesity, High blood pressure (HBP), enuresis, delayed closure of the fontanelle | 0 | 0.0 | 1 | 0.7 | 1 | 0,5 |
| Miscellaneous: Constipation | 0 | 0.0 | 2 | 1.4 | 2 | 0.9 |
| Miscellaneous: Constipation, asthma, urinary tract infections (UTI) | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Constipation, overweight, poor weight gain, swollen lymph node | 0 | 0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Constipation, gastroenteritis, neutropenia | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Mumps | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Paroxysmal, restrictive diet (vegetarian) | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Recurrent wheezing, cerebral palsy, poor weight gain, restrictive diet | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Wheezing, stiff neck, constipation, abdominal pain, diarrhea | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Recurrent wheezing | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Plagiocephaly | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Pneumonia | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Caudal cyst, poor weight gain | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Caudal cyst | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Reflux, developmental delay | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Reflux, urinary tract infections (UTI) | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Recurrent wheezing, coffee grounds, upright gait | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Wheezing, poor weight gain, constipation | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous. Wheezing, poor weight gain, purpura, obesity, prematurity | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Down syndrome | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Vulvar synechiae, cerebral palsy, recurrent wheezing | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Suspected purpura, urinary tract infections (UTI), adenopathies, developmental delay | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Thelarche | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Traumatic brain injury | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Thrombocytopenia, recurrent urinary tract infections, constipation | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: developmental delay, hepatitis, chronic diarrhea, laboratory monitoring of neutropenia, laboratory monitoring after inflammatory disease | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Poor weight gain | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous: Elevated transaminases | 0 | 0.0 | 1 | 0.7 | 1 | 0.5 |
| Miscellaneous (not specified) | 0 | 0.0 | 81 | 54.8 | 81 | 36.4 |
| Notes: | (\*) This variable only indicates the main reason why children were referred from emergency services for evaluation or follow-up by a pediatrician. | | | | | | |

**Supplementary file. Table 2. Reasons for Consultation Among Children With a History of Food Selectivity, Refusal to Eat, or Vomiting After Eating, PAMC, September 2023 – September 2024.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variables (N=12) | Categories | Refusal to eat/Food Selectivity | | Refusal to eat/Vomiting after eating | | Total (N=12) | |
| **n** | **%** | **n** | **%** | **n** | **%** |
| Reason for Consultation | Anemia | 3 | 37.5 | 2 | 50.0 | 5 | 41.7 |
| Anemia and feeding difficulties | 1 | 12.5 | 0 | 0.0 | 1 | 8.3 |
| Anemia and food selectivity | 2 | 25.0 | 0 | 0.0 | 2 | 25.0 |
| Anemia and suspected Goldenhar Syndrome | 1 | 12.5 | 0 | 0.0 | 1 | 8.3 |
| Abdominal pain | 0 | 0.0 | 1 | 25.0 | 1 | 8.3 |
| Bowel failure | 1 | 12.5 | 0 | 0.0 | 1 | 8.3 |
| Down syndrome | 0 | 0.0 | 1 | 25.0 | 1 | 8.3 |

**Supplementary file. Table 3. Study variables.**

|  |  |
| --- | --- |
| **Variables** | **Description** |
| **Child Anemia** | |
| Anemia, ferropenia or mycrocitosis | Anemia status of alll children aged 6months-5 years. Categorized as No and Yes |
| Anemia or anemia risk, based on Hb level) | Categorized as "Without anemia" (Hb>11.4g/dL) and "Has anemia/at risk of developing anemia (11.0g/dL≤Hb≤11.4g/dL). |
| Anemia severity classification, based on Hb level | The cutt-off values for anemia severity classification were: borderline or pre-anemic stage (11.0 g/dL ≤ Hb ≤ 11.4 g/dL), mild (10.0 g/dL ≤ Hb ≤ 10.9 g/dL), moderate (7.0 g/dL ≤ Hb ≤ 9.9 g/dL), and severe (Hb < 7.0 g/dL) anemia. |
| Anemia, based on Hematocrit level | Categorized as "Not anemic (34%-40%)" and "Has anemia (Hematocrit<34%) |
| Anemia, based on size of red blood cell (RCB) measured by the mean corpuscular volume (MCV) | Categorized as "Microcytic (<80fL)", "Normocytic (80-100fL) and "Macrocytic(>100fL)" |
| Iron deficiency, based on serum iron level | Categorized as "Iron deficiency anemia (serum iron <30mcg/dL)", "Mild iron deficiency/pre-anemic stage (30-50 mcg/dL)", "Normal range (>50-120mcg/dL) |
| Iron deficiency anemia (IDA), based on ferritin level | Categorized as "Iron deficiency anemia (>12 ng/mL)", "Adequate iron storage in children with inflamation/IDA in children with no inflammation(12-30ng/mL)", "Risk of iron overload (>500ng/mL)" |
| Sickle-cell trait | Categorized as "No/Pendent" and "Yes, sickle cell trait" |
| **Sociodemographic characteristics** | |
| Gender | Categorized as "Male" and "Female" |
| Child´s age | Categorized as "6 months-1 year", "2-3years", "4-5years" |
| Country of residence | Categorized as "Portugal" and "Other" |
| Region of residence | Categorized as "Great Lisbon" and "Other regions" |
| Caregiver's Degree of kinship | Categorized as "Mother" and "Father" |
| Caregiver´s Level of education | Categorized as "Basic or Secondary" and "Technical or Higher education" |
| Country of origin of the child´s mother | Categorized as "Portugal", "CPLP" and "Other countries" |
| Mother's occupation (by role) | Categorized as "Specialized Intellectual and scientific roles" and "Administrative, Managerial or Support roles" |
| Country of origin of the child's father | Categorized as "Portugal" and "Other countries" |
| Father´s occupation (by role) | Categorized as "Administrative, Managerial or Support roles" and "Other roles" |
| **Nutritional characteristics** | |
| Had exclusive breastfeeding | History of breastfeeding. Categorized as "No" and "Yes" |
| Duration of exclusive breastfeeding | Categorized as "1-5 months" and "6-12 months" |
| Complementary feeding | Categorized as "No" and "Yes" |
| Cereal porridge intake | Categorized as "No" and "Yes" |
| Number of meals/day | Categorized as "3-4 meals/day", "5 or more meals/day" |
| Cereals and derivatives, tubers | Categorized as "No" and "Yes" |
| Meat, fish and eggs | Categorized as "No" and "Yes" |
| Dairy products | Categorized as "No" and "Yes" |
| Fruits | Categorized as "No" and "Yes" |
| Legumes | Categorized as "No" and "Yes" |
| Vegetables | Categorized as "No" and "Yes" |
| Fats and oils | Categorized as "No" and "Yes" |
| Mininum dietary diversity | Categorized as "1-3" and "4 or more" [Inadequate (1-3 food groups); Adequate (4 or more food groups)] |
| Excessive milk consumption | Categorized as "No" and "Yes (> 500mL/day)" |
| Supplements intake | Categorized as "No" and "Yes" |
| Type of supplements | Categorized as "Iron" and "Iron, folic acid and vitamin B12/Iron and multivitamins" |
| **Anthropometric characteristics** |  |
| Weigh percentile | Categorized as "Adequate weight for age (Percentile 3-97)" and "Not adequate for age [Percentile <3 (low weight for age) or Percentile >97 (high weight for age]" |
| **Health characteristics** | |
| Vomit or refusal to eat | Categorized as "No" and "Yes (Had vomit or Refused to eat" |
| Presence of infection or inflammation by C reative protein (CRP) level | Categorized as "Normal (CRP <5.0mg/mL)" or "Presence of infection, inflammation or other disease (CRP>5.0mg/mL) |
| Glucose | Categorized as "Normal (60.0-180.0mg/dL)" |
| Bilirubin | Categorized as "Normal range (0.30-1.20mg/dL)" and "Hyperbilirubinemia (>1.20mg/dL)" |
| Urea | Categorized as "Normal (5.0-36.0mg/dL)" and "Uremia (>36mg/dL)" |
| Had any hospitalization (in the past) | Categorized as "No" and "Yes" |
| Duration of hospitalization (in days) | Categorized as "Up to 5 days" and "More than 5 days" |