

Covid child in a Vaccine Center of Local Service Agency – West Bergamo - Italy

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Background

New Coronavirus 2019 pandemic has created problems in the Health & Care System and we have seen additional changes in the managements of babies during transition period between post-partum or hospitalization and the across of vaccine and routine well child screening. International indications suggest the post-partum discharge management of newborns and preventive take care of basic pediatrician, like referents before one month of life in the ambulatory setting and start of universal immunization about 2 months of age in base of health status for a routine childhood screening during Sars-Covid-19 pandemic.

Results

Child had a number of 73 or 44.8% positive-Covid with contact history in family members n° 90 or 55.2% (mother 74.4% and father 25.5%), the incubation period is about 14 days and the Coronavirus could be isolated by test in the nasal-oral-pharynx for up 7-14 days and stool for more than 30 days. In our study, co-infection and co-morbidity are reported in up of 10.92% child with current hepatitis 2.72%, allergy 24.54%, dermatitis 6.36%, neurological disorders 15.45%, rare-diseases 81.81%, gastrointestinal 13.63%, respiratory 16.36% complications (influenza 1.81% or symptomatic-Covid 16.8%), VI disease 4.54%, interventions 2.72%, urinal infections 2.72%, after first dose of Rotavirus we note cases of diarrhea or constipation in 5.45% for a short time and solved without surgery operation.

Material & Methods

Study design and participants are child and patients of observation cohort study. We identified all patients between 12 September 2020 and 29 March 2021 at Treviglio Vaccine Center (Local Service Agency near Bergamo). In this group, we found n°163 of positive cases by Sar-CoV-19 or 95.88 % of suspect cases n°170 on 1007 included in n° 988 or 90.16% of babies under 2 years of age and 5.2% of the upper 3 year of age to 15 years old and between 16 to 93 years of age 4.5%. A good part with co-morbidity or co-infections in our casual study for natural access to our Vaccine Center.

Conclusions

Literature studies and our data show that perinatal transmission of

Covid 19 is unlikely needed, if the correct hygiene precautions are undertaken in mother rooms during breastfeeding promotions in hospital and at home, thanks to parental education of normal infant and specially for disabilities protective strategies. The individual prevention is the key to maintain in good health these youngest people with a precautional distance from other adult people always with surgery or FFP2 face mask. The vaccine event started in February of 2021 with sanitary person and teachers, now continuous with elder people to protect them and reduce numbers of deaths in Italy. Where we are in a third lock-down in only one year, because we have many variants of these New Coronavirus: Brazilian with higher mortality and England with spread diffusion and morbidity in younger people than last years. The future of this pandemic is uncertain owing to effects of Vaccines with viral vector respect to mRNA and the afraid of persons to accept the first type of Vaccine suggest by doctors in the Hub Vaccine Center like a minimal percentual of complications. In fact, we have seen insignificant cases. For this reason, we suggest to improve surly on mRNA Vaccine and study for child; so that we can have in the next future an immune-protection of all population: youngest to ancient persons in Italy, European and World and a return to a normal style of life in community.

Background

In literature of Health Service, we have a quite correct number of death people from Coronavirus Disease 2019, in a classical genotype arrived in Italy in January 2020 and caused of a so high number of elderly patients in reanimation, compared to the rest of the Italian population. Just in 2021, we record date of younger adult in Intensive Care of our Hub Covid Center in Treviglio Hospital.

In our Vaccine Center (VC), we have noted a significant increase of oral-nasal-pharyngeal swab or NOP tests study done in (n°163) and 16.18% of 1007 patients with a randomized access to VC of Treviglio for Plan Italian Vaccine 2020-2021 in the first and second Childhood, and urgent Adult.

This contact training of positive patients, at the beginning not included child, but since September 2020 to March 2021 about 6 months we have indirect date of this test also in little babies to

maintain their families in Quarantine for 14 days, with a natural shift of plan Vaccination Plan for age.

Clinical date

Our study of Vaccine Date count: n°906 of child since 1 month to 36 months of age and between of 3-16 years with a n° 53 and also in a n° 46, and adult with a percent of respectability (90.16%, 5.2%, and 4.50 %) shared by sex: male n° 467 or % 46.37, and female n° 539 or 53.52%.

In this study of analysis, we have done a distinction by the first vaccine and recalls to don't replay the same date but to study the age, in which babies become positive are n° 20 child or 1.98%; so, discover if this condition it's happen after or before their parents in

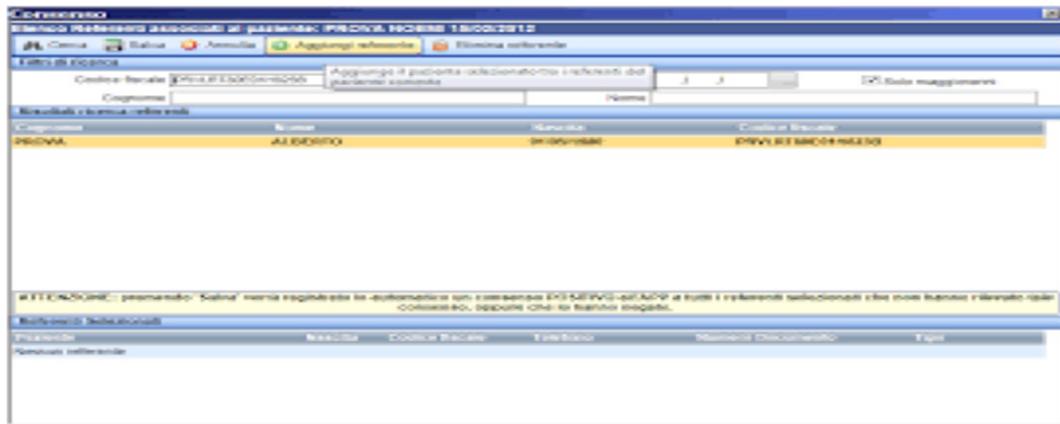
n°9 child or 45%.

By observations, we note in generally that these dates are researched after a positive test of parent or relatives. But babies can be the natural reserve of Covid and transmitted virus during regular contact with their corporeal fluids.

Material & methods

we use database of SIAVR or Regional Vaccine Registry Information System to calculate of new patients in the last six months of Pandemic 2020-2021 and the age of positive NOP test.

SIAVR of Lombardy Region in Italy Public Service



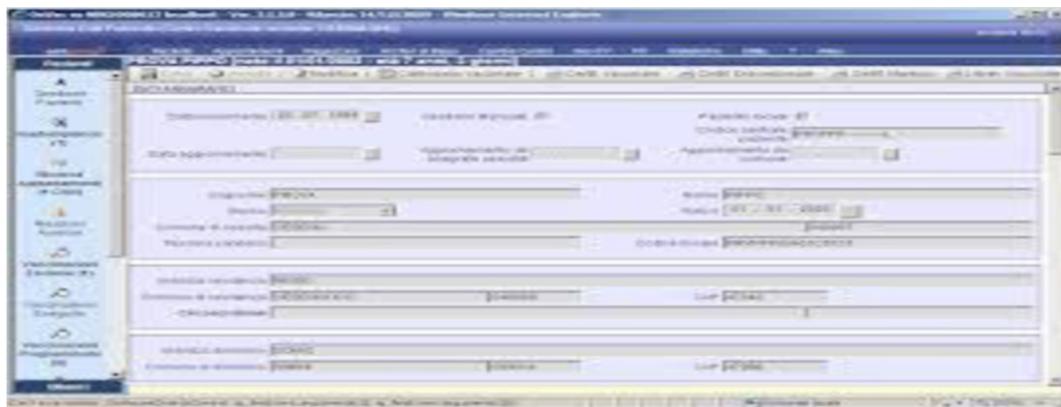
- 1-Select patients
- 2-Personal date
- 3-Vaccine Plane
- 4-Appointments
- 5-Certification
- 6-Historical date

Figure 1: Regional Vaccine Registry Information System – select patients

Since 9 September 2020 to 29 March 2021, we have inserted data in excel file to analysis data base of new 1007 patients with recalls in Vaccine Center in Treviso. This data evidence Personal data

and Certification of single Vaccine Plan with appointment.

SIAVR of Lombardy Region in Italy Public Service



- 1-Select patients
- 2-Personal data
- 3-Vaccine Plane
- 4-Appointments
- 5-Certification
- 6-Historical date

Figure 2: Regional Vaccine Registry Information System – print certification

We do a randomized casual study to analysis the epidemiological data, and underlines the point up of this phenomena correlation both babies with asymptomatic disease respect to signs and symptoms of Covid in their parents and/or adult caregivers.

or elder relative, for their personal protection.

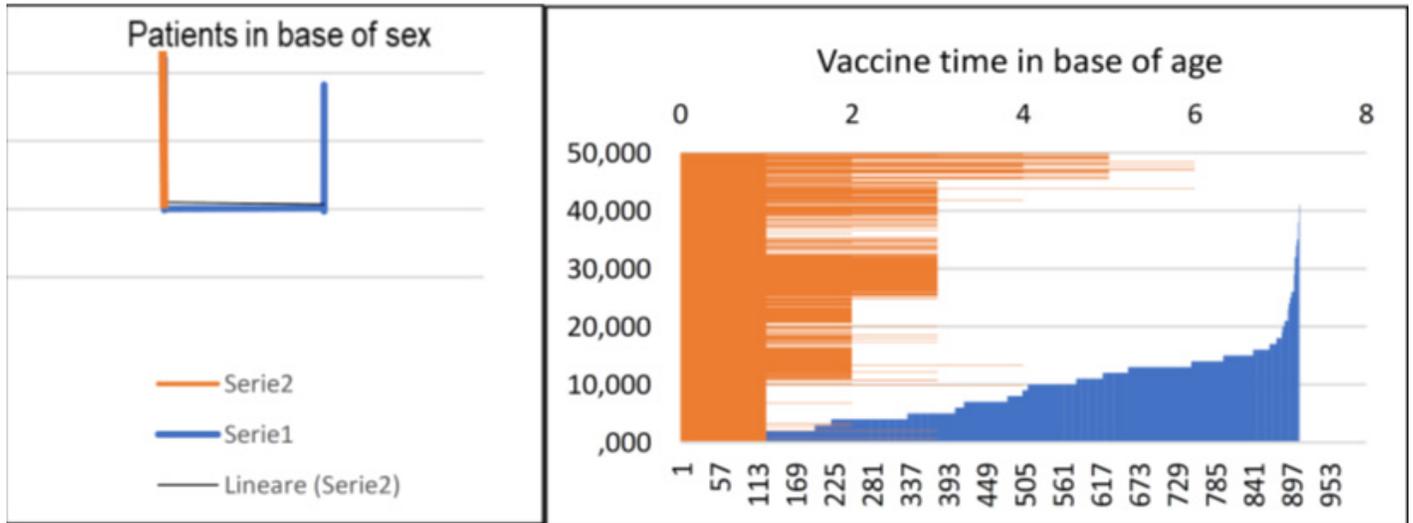
We suggest according to date of literature, to change pampers of babies with accurate clean hands before and after or wear gloves is very important, in special way, when caregivers are grandparents

On 2020 year, we have noted a gradual increase numbers of compliance respect to Calendar Vaccine Plane with a constant recovery of patients under 3 years of age (with 90.1%), in time for free public service but in case of child between 3 years of age to 16 years (with 5.2%) in copayment like Italian low and recommendation of childhood vaccine plan.

Results

The analysis show that we have 539 female patients and 473 male

patients, of which the 99.51% has an optimal cover of Italian calendar vaccine plan according to Minister recommendation.

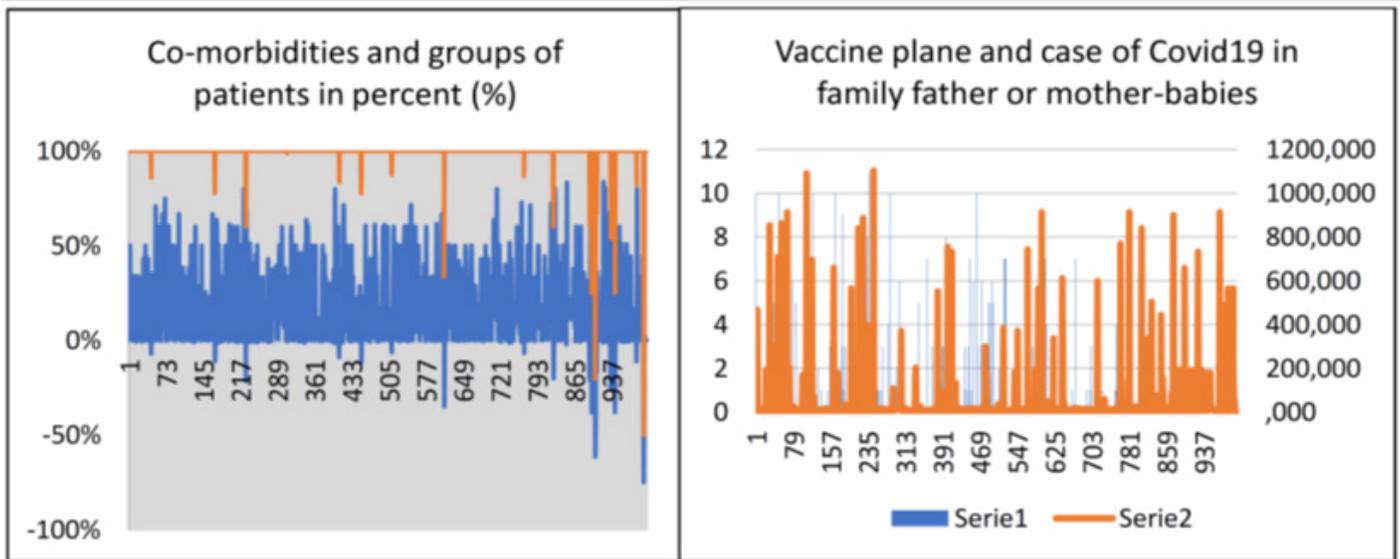


1. groups of patients in base of sex.

2. vaccine time and mean age for types.

These results show us an evident incident of births and babies with SARS-Covid-2 in last months of 2020 during the second lock-down and in reference to the recalls. The Covid percentual is of

16.88% with an incident of NOP test for symptoms is of 95.88% and with a family direct contact of 55.21%.

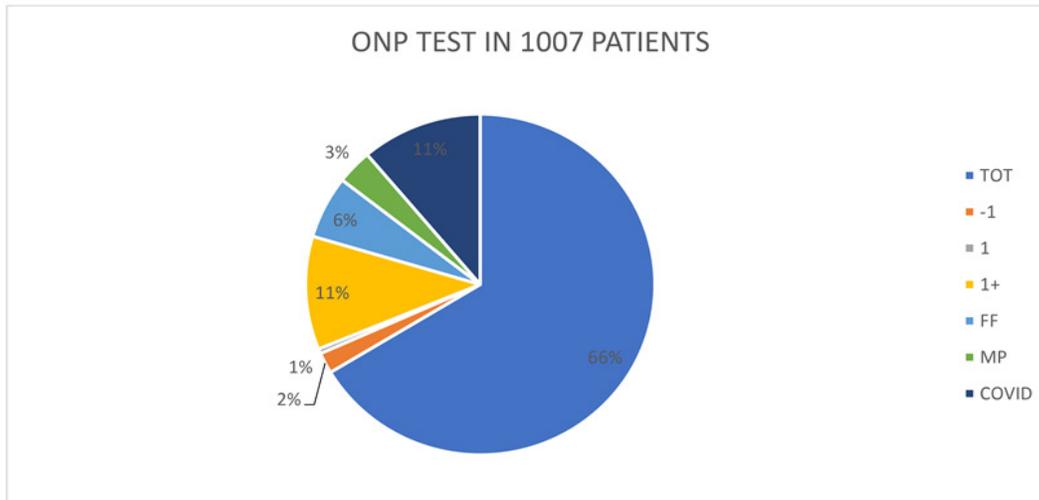


3. Age of patients and health or pathologies.

4. vaccine plane and case of Covid 19 in mother-baby.

The analysis of this date allows us to consider a correlation both suspect of Covid n° 170 or 17% with n° 30 or 2.9 % negative, and n° 163 or 16.18% positive ONP test divided into two groups of patients (n°73 or 44.78%) and families (n°90 or 55.21%). In gen-

erally, with have date of only ONP test in child and also serological tests in their parents/relatives for needs of job with natural change of groups.



5. Groups of positive Covid in ONP test in babies and family

Now, we have a problem of variants Covid not only type 2 of 2019 (from Hubei) but also by English, Brazilian and others variant. To analysis the difference is important to do molecular tests to genotyping the origin of Covid, actually, in maximum diffusion is English genotype with a minor sever clinical case; while Brazilian genotype is more aggressive and with a reduced spread in population, owing to deadly consequences of this variant of Covid in Italy by official reports.

Conclusions

Child data in Central Vaccine of West Bergamo, Local Agency Service, suggest to control with more attention babies and correlation with their families. The aim is to understand the possibility to reduce incident of Covid infection in adult vaccine with regular vaccine in child plan or systematic calendar. So that this pandemic can be change in an epidemic disease under control of Public Service with a regular test in stools of babies to discover before periodic or annual variants and different genotypes could appear in short or long times.

For this reason, we wait a Covid-Vaccine Plan in the First Childhood, like our date show us, to stop this Pandemic as soon as possible, like the history of vaccine teach us in the pass. We think that is the only way to return in a normal style life and insecurity. With the possible to see child to back to school in a regular program for education, socialization and treatment of children with pathological needs like: cancer, neuro-disorders and rare-degenerative diseases.

The study of these data evidence the scientific importance to correlate Covid in intra-family co- infection in normal families are easier than pathological families where there is a common attention to protect babies by other diseases in base of single age.

In fact, the analysis of this pandemic teaches us the importance to see this public phenomenon and terrible planetary situation a new

way to improve the quality of life and support of disabilities and handicap child in their schools. Where they need to be included with classmates and at home, if they need to go on with the distance teaching class with special educators or therapists of behavior with the same right of others child, in a security management of single patient and his family [1-6].

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