Incidence of chest infection in breast feeding vs bottle feeding in infants اعداد الطلبة براء حسي عليوي زهراء
قاسم كولي رقيه حيدر حسي زهراء علي لفته هدى محمد تقي بتول حسن رومي زهراء احمد عبد عون زهراء غازي اهميل زينب ماجد
حيدر اقبال حاكم عسر بإشراف ا.م.د. رسل فيحان موسى بسماللهالرحمنالرحيم ُ اه َ ن ْ َـي ى آت ٰ و َ َ ست وا ْ َ ُ ده
.“زي جـ ـ ـ ـِ ْ َ ك ن ـ ـ ـ ـَ ِ ٰل َ كـ ـ ـ ذ َ و َ ٌ مال ً ـ ـ ـ ـْ ِ وع ما َ ك ً حـ ـ ـ ـْ ُ ي ”شـَ َ أَ ُ لغ َ ـَا ب لـَ َ و َ
الاهداء ِ فيقلوبمحبيه،إلىالغائبِالذيماغاَب لحاضر .َ ِ سن ِ ح ْ ُ ال ْ صدقاللهالعلياالعظيم سورة القصص، اليات 14
إلىالغائبِبعنالعيِن،ا ن ّ نله ِلالر ِضكماأ ٌ َوأما لموعود،إلى ْمنه لمشرقةوأمُلنا ُسنا ا ُ عنا،شم َفه ُلط تجلزا ِلة َوج،إلىالمر ِ
لقا ِمةالم ِتوالع لمنتظر نله ِلالسماء،إلىا ٌ لنجوَمأما ا ُحبيها،إلىمن يمتقفي ينا الذييمسحعليهابكفِهالكر لجورِوالعدوان،إلىحبيِبُقل ِو ا ّلال
فرج .لحسنعج جةابنا لح ُنتَظرا لم أرواحنالهالفدا،إلىإمامناالرؤوفوالعد ِلا Content 1-Introduction 2-Methodology 3-Figures 4-Tables 5- statistical analysis 6-Discussion 7-Recommendation 8- Reference Introduction Respiratory tract infections are a leading cause of morbidity in infant, and is One of the most common and dangerous diseases especially in infants(1) . infants can be considered children anywhere from birth to 1 year old.During the last 3 months of pregnancy, antibodies from mothers are passed to their unborn babies through the placenta(3). This type of immunity is called passive immunity because the baby has been given antibodies rather than making them itself.(3) Immunity in newborn babies is only temporary and starts to decrease after the first few weeks or months(3). As a result, babies tend to get a high number of infections, usually 4 to 8 per year.One of the most common infections in infants is chest infection.A chest infection is an infection of the lungs or large airways. Some chest infections are mild and clear up on their own, but others can be severe and life threatening. Infancy, in particular, is a time of increased disease susceptibility and severity. The infant immune system is different from the adult immune system, and this has a critical impact on susceptibility to respiratory viral infection. There is a general naivety of the infant immune system: the lack of prior exposure to pathogens leads to a lack of immune memory(1).The disease burden from respiratory infection is greater than that of any other cause of disease In 2002, 18% of mortality for children younger than 5 years of age was caused by respiratory infections. Respiratory tract infections in the young also impose a large and intermittent burden on the health care infrastructure(1). many studies confirm a protective role of breastfeeding against respiratory infections in the long term. breast milk has been classified as the gold standard for infant nutrition during early postnatal life.Breast milk contains hundreds to thousands of distinct bioactive molecules that protect against infection and inflammation and contribute to immune maturation and proper organ development.(2) We report here the results of a cohort study exploring the association of breastfeeding and bottle feeding with viral respiratory infections in infants in Iraq. Methodology Subjects Study was done in Iraq and the period of study was between third of March 2022 and 30th of April 2022.Collecting data of this study based on a structured questionnaire was designed, modified and translated to Arabic language in order to reach the idea of the survey in an easy way to the participants in the survey. It was pretested, revisioned and discussed with the supervision of our doctor during period of study and before publish it. Purpose of this test was to assess the clarity of question and identify any ambiguous or lengthy questions, in addition to testing its applicability. The majority of participants that took part in the study were Male (64.2) , with only (35.8) of participants female Materials The survey contained both quantitative and qualitative data that may point to respiratory infection in infants who are breast-feeding against formula feeding.This survey was used to gather data from participants. The survey consisted of about 11 questions, including both quantitative and qualitative questions. The questions assessed the incidence, type, and severity of respiratory infection with the type of lactation, whether breast-feeding or formula-fed, in infants whose age was less than

one year. • 1_Baby's name? • 2_Baby's Wight • 3_Baby's age? • 4_Gestational age? • 5_Baby's born? Be for 37 weeks , Between 37 and 42 weeks , After 42 weeks • 6_The financial condition of the family? Mediocre , Poor , Good • 7_Type of feeding? Breast feeding only , Bottle feeding only , mixed feeding(Breast feeding with bottle feeding) • 8_ Is the mother smoking? • 9_Is the mother has any chronic disease? • 10_The type of infection? Bronchiolitis , Asthma , Pnemonia ,Other • 11_ The intensity of infection? Sever , Moderate Procedure Surveys were distributed to participants via website was published through varies social media platforms. The website contained description about the research project, request for participation and the consent form . In all, 173 people decided to participate in this study .Confidentiality of all participants was guaranteed through the use of coding with random participant numbers. Internet Protocol addresses were not collected from participants. Survey data remained anonymous among participants.

Discussion To better understand the results of this study, it is useful to place them in the broader context of previous research. One of the more widely published findings on the relationship between breastfeeding and concurrent illness is the decreased incidence of respiratory infections in children who breastfeed when compared to children who do not. The findings of this study – that both exclusive and non‐exclusive breastfeeding are protective against respiratory infections – therefore echo the findings of multiple other studies [4,5,6]. This study further clarifies these relationships by indicating that the protective effects of breastfeeding remain at work at least through the age of 18 months for children who continue to receive breastmilk. This is not an unprecedented discovery as, according to a meta‐analysis published in 2015, cumulative evidence supports that breastfeeding protects against respiratory infections until the age of 2 years [7]. This study also followed these trends through the age of 18 months, showing that the protective properties of breastfeeding continue through this age range in children who continue to receive breastmilk, but that the protection is somewhat less in the older age group. Additionally, this study found exclusive and non-exclusive breastfeeding between ages 3– 6 months to be protective against respiratory infections with fever. A study conducted by Cushing et al. found, like we did, that the risk of upper respiratory infection increased with breastfeeding, but the association was not statistically significant [8]. Dewey et al. found no association between breastfeeding and the frequency of respiratory infections (which they claim were nearly all upper respiratory infections) in the first or second year of life, when comparing children who breastfed for 12 months or more to children who never breastfed [9]. And multiple studies actually found breastfeeding to be associated with lower risk of upper respiratory tract infections [10,11], or acute respiratory infections in general [12, 13]. important strength of this study is the large study population drawn from the general population. On the basis of previous findings in our cohort, respiratory illnesses are socially patterned and related to several mother and child characteristics.Our study design provided information on multiple potential confounders and allowed for follow-up into childhood We hypothesize that the apparent positive association between breastfeeding and the common cold may not represent a true causal relationship. This leads us to consider one potential limitation of this study – namely that this study relies upon parental report for its data. Although data is collected on a regular basis from parents, parents may differ in the accuracy of their reporting, or their consideration of what constitutes a true

illness. This variability may be magnified for so-called “minor” illnesses, like the common cold. Therefore, the perceived effect of breastfeeding on odds of respiratory illness could plausibly be the result of breastfeeding mothers’ hyper-vigilance in regards to noticing and/or reporting upper respiratory symptoms. A causal relationship is not outside the realm of possibility, however. The breastfeeding relationship places infants and mothers in very close proximity on a very regular basis, perhaps facilitating transmission of respiratory viruses. Alternatively, mothers of children with more frequent respiratory symptoms may choose to breast feed for longer to impart to their children perceived health benefits derived from breast milk. It is also possible, as suggested above, that respiratory illnesses in breastfeeding children tend to be less severe than those in children who do not breast feed, and therefore more frequently present as common cold, instead of manifesting as febrile illness.Finally, as our aim was to assess the effect of exclusive breastfeeding on the risk of respiratory infections, we decided to include children with partial breastfeeding and those with artificial feeding in the same subgroup. This is a typical issue in the design of studies on breastfeeding and health outcomes and might have biased in the resulting effect of breastfeeding on respiratory infections.
Recommendation Breast feeding is one of the most important neonatal ,infant , and child health , growth , and development. Apart from the clear nutritional superiority of breast milk,breast feeding protect against infant death and morbidity.exclusively breast fed infant are likely to suffer only a quarter as many episodes of diarrhoea and respiratory infection as babies who are not . Mothers benefit from breast feeding as it reduces the risk of pph and lowers the risk of breast and ovarian cancers Reference
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