

**Table 4. Characteristics of studies that included in systematic review.**

<b>ID</b>	<b>Author</b>	<b>Country</b>	<b>Year</b>	<b>Subgroup age</b>	<b>Title</b>	<b>Journal</b>	<b>Outcome</b>
1	Zhang et al., (27)	China	2023	All age	Chromosomal abnormalities and structural defects in fetuses with increased nuchal translucency at a Chinese tertiary medical center	Frontiers in Medicine	From a total of 4,879 pregnancies, 264 had NT >95th percentile, with 8 cases of CHD, 17 neural tube defects, 2 abdominal wall dysplasias, and 7 skeletal dysplasias.
2	Kristensen et al., (11)	Denmark	2023	All ages	Increased nuchal translucency in children with congenital heart defects and normal karyotype-is there a correlation with mortality?	Frontiers in Pediatrics	Among 4,469 fetuses with congenital heart defects, 216 had NT >3.5 mm.
3	Esteves et al., (29)	USA	2023	All ages	The value of detailed first-trimester ultrasound in the era of noninvasive prenatal testing	American Journal of Obstetrics and Gynecology	Among 2,156 samples, 11 had NT >3 mm, with 15 cases of CHD, 3 abdominal wall defects, and 6 neural tube defects.
4	Dilek et al., (30)	Nigeria	2023	All ages	Evaluation Fetal Heart in the First and Second Trimester: Results and Limitations	Nigerian Journal of Clinical Practice	Among 3,280 samples, 21 had NT >2.5 mm, 16 had NT >3 mm, 32 cases of CHD, and 2 cases of abdominal wall defects were identified.
5	Bottelli et al., (31)	Italy	2023	All ages	Prenatal detection of congenital heart disease at 12-13 gestational weeks: detailed analysis of false-negative cases	Ultrasound Obstet Gynecol	Among 7,080 samples, 76 cases of CHD were identified, while the number of fetuses with NT >95th percentile was not reported.
6	Paija et al., (32)	Finland	2022	All ages	Nuchal Translucency as an Indispensable Screening Tool for Predicting Congenital Heart Diseases	European Journal of Molecular and Clinical Medicine	Among 100 samples, 3 cases of CHD were identified, with 1 fetus having NT 4.5-5.4 mm and 2 fetuses having NT >5 mm.
7	Jin et al., (33)	China	2021	All ages	A Chinese multicenter retrospective study of isolated increased nuchal translucency associated chromosome anomaly and prenatal diagnostic suggestions	Scientific Reports	Among 1,197 samples, 108 had NT >3 mm, and 21 cases of aneuploidy were identified.
8	Karadzov et al., (17)	North Macedonia	2019	All ages	Screening performance of congenital heart defects in first trimester using simple cardiac scan, nuchal translucency, abnormal ductus venosus blood flow and tricuspid regurgitation	Congenit Heart Dis	Among 22,900 samples, 82 had NT >95th percentile, and 62 cases of CHD were identified.

continued

9	Dulgheroff et al., (34)	Brazil	2019	All ages	Fetal structural anomalies diagnosed during the first, second and third trimesters of pregnancy using ultrasonography: a retrospective cohort study	Sao Paulo Medical Journal	Among 1,102 samples, no CHD was identified, while 3 cases of genitourinary defects and 3 cases of skeletal defects were observed.
10	Tang et al., (35)	China	2019	All ages	The value of increasing nuchal translucency in diagnosis of congenital heart disease in fetus	Chinese Journal of Evidence-Based Medicine	Among 2,125 samples, 68 had NT >2.5 mm, and 11 cases of CHD were identified.
11	Borrell et al., (36)	Spain	2013	All ages	First-trimester detection of major cardiac defects with the use of ductus venosus blood flow	Ultrasound Obstet Gynecol	Among 13,773 samples, 15 had NT >95th percentile, and 37 cases of CHD were identified.
12	Eleftheriades et al., (37)	Greece	2012	All ages	Detection of congenital heart defects throughout pregnancy; impact of first trimester ultrasound screening for cardiac abnormalities	J Matern Fetal Neonatal Med	Among 3,774 samples, 5 had NT >95th percentile, and 29 cases of CHD were identified.
13	Volpe et al., (38)	Italy	2011	All ages	Fetal cardiac evaluation at 11-14 weeks by experienced obstetricians in a low-risk population	Prenat Diagn	In the study by Volpe, among 1,455 samples, 50 had NT >95th percentile, and 38 cases of CHD were identified.
14	Pereira et al., (39)	Portugal	2011	All ages	Contribution of fetal tricuspid regurgitation in first-trimester screening for major cardiac defects	Obstet Gynecol	Among 45,191 samples, 85 cases of CHD were identified, with 30 fetuses having NT >95th percentile and 18 having NT >99th percentile.
15	Timmerman et al., (40)	Netherlands	2010	All ages	First-trimester measurement of the ductus venosus pulsatility index and the prediction of congenital heart defects	Ultrasound Obstet Gynecol	Among 1,019 samples, 318 had NT >95th percentile, and 24 cases of CHD were identified.
16	Abu-Rustum et al., (41)	Jordan	2010	All ages	Role of first-trimester sonography in the diagnosis of aneuploidy and structural fetal anomalies	J Ultrasound Med	Among 1,370 samples, 5 had NT > 95th percentile, with 6 cases of aneuploidy, 6 CHD, 2 abdominal wall defects, 1 genitourinary defect, 1 skeletal defect, and 4 neural tube defects.
17	Muller et al., (42)	Germany	2007	All ages	Nuchal translucency measurement and congenital heart defects: modest association in low-risk pregnancies	Prenat Diagn	Among 4,144 samples, 100 had NT >95th percentile, and 24 cases of CHD were identified.
18	Lombardi et al., (43)	Italy	2007	All ages	Fetal echocardiography at the time of the nuchal translucency scan	Ultrasound Obstet Gynecol	Among 608 samples, 35 had NT >95th percentile, including 3 cases of CHD.
19	Michailidis et al., (44)	Greece	2001	All ages	Nuchal translucency measurement and pregnancy outcome in karyotypically normal fetuses	Ultrasound Obstet Gynecol	Among 6,650 samples, 4 had NT >95th percentile, and 11 cases of CHD were identified
20	Hyett et al., (45)	United Kingdom	1999	All ages	Using fetal nuchal translucency to screen for major congenital cardiac defects at 10-14 weeks of gestation: population based cohort study	BMJ	Among 29,154 samples, 1,822 had NT >95th percentile, and 50 cases of CHD were identified