



PREVALENCE OF ASTHMA AMONG 13-14 YEARS OLD SECONDARY SCHOOL CHILDREN FOR THE YEAR 2020- 2021



للسيطرة على الربو في العراق

Department of Prevention and Control
of Non-communicable Diseases

PREFACE

Asthma is a major public health problem among children. The prevalence of asthma is increasing in many parts of the world.

Asthma symptoms are common among adolescents, with a global prevalence of 11.0%. However, asthma is a rare cause of death, contributing to less than 1% of all deaths in most countries. According to non-communicable disease risk factors STEPS survey 2015, 2.2% of adults reported having the asthma,

It is a leading cause of school absenteeism, with millions of children missing school days every year. Persistent absenteeism can harm a child's education and social development.

The problem was tackled worldwide to assess the size of the problem. This survey employs a globally adapted questionnaire from the International Study of Asthma and Allergies in Childhood (ISAAC) and its extension, the Global Asthma Network, uses standardized methods that can be implemented in a wide range of settings. Which have been converted into an electronic format and distributed to selected schools.

This survey aims to provide comprehensive data to assess and determine the prevalence, severity, and control of asthma symptoms among school children aged 13 to 14 years in Baghdad intermediate schools, in collaboration with the Ministry of Education. The information collected will contribute to the development of effective intervention strategies.

The transition to e-learning during the COVID-19 pandemic created the opportunity for the survey to be conducted by using an electronic form of the questionnaire. This report highlights the need for increased collaboration to improve asthma control in school children.

Thanks to the Ministry of Education and the participating organizations for their efforts, we look forward to working with all stakeholders to improve asthma surveillance, train health professionals, educate individuals with asthma and their families, and raise awareness of asthma in the community.

By working together, children with asthma, their families, and their schools can help to prevent hospitalization and absenteeism and ensure that children with asthma have the opportunity to reach their full potential.

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1. INTRODUCTION

1.1 Background

Asthma is one of the most important non-communicable diseases worldwide, with a considerable impact on both children and adults. While children have a higher incidence and prevalence, adults have a higher morbidity and mortality rate. (1)

The Global Initiative for Asthma (GINA) describes the essential features of asthma as “a heterogeneous disease, usually characterized by chronic airway inflammation. Asthma is defined by the history of respiratory symptoms such as wheeze, shortness of breath, chest tightness, and cough that vary over time and in intensity, together with variable expiratory airflow limitation” (2)

The prevalence, morbidity, and mortality of childhood asthma have increased significantly over the past four decades around the world. Asthma is considered the most common long-term illness in children, but it remains underdiagnosed and undertreated. Early diagnosis and treatment are keys for children with asthma; however, many children do not have access to these essential services. (3)

Asthma can cause a variety of symptoms, including coughing, wheezing, shortness of breath, and chest tightness. The severity of these symptoms can range from mild to severe and vary from one person to another. In some cases, symptoms can get so bad that they interfere with daily activities or even lead to hospitalization. Asthma symptoms can be exacerbated at night or during physical activity. Many factors can contribute to the risk of developing asthma, including genetic susceptibility to asthma or atopy, early-life events such as being born small or being exposed to smoke, and exposure to environmental allergens and irritants. (4)

The economic burden associated with asthma is considerable, encompassing both direct healthcare expenses, which involve hospitalizations, emergency room visits, medical doctor consultations, and medications, as well as indirect non-medical costs like absenteeism from work or school, reduced productivity in these settings, and the impact of premature mortality. (5)

The International Study of Asthma and Allergies in Childhood (ISAAC) is a globally recognized research initiative aimed at understanding the prevalence and severity of asthma and allergies in children and adolescents. One key component of ISAAC is the standardized questionnaire, which serves as a powerful tool for gathering data. Specifically designed for children aged 13–14 years, this questionnaire helps researchers collect consistent information across diverse geographical and socio-economic settings. By employing this uniform methodology, ISAAC enables international comparisons, providing valuable insights into the global burden of asthma in this age group. This initiative has significantly contributed to our knowledge of childhood asthma, enhancing

public health interventions and policies worldwide. The ISAAC program concluded its formal activities in December 2012. Following this, the establishment of the Global Asthma Network in the same year marked a continuation of the efforts initiated by ISAAC, focusing on advancements in the field of asthma research. (6,7)

Phase III of ISAAC found that the global prevalence of asthma in children aged 13-14 years was 11.0%. The prevalence of asthma was higher in high-income countries (14.0%) than in low- and middle-income countries (8.0%). The prevalence of asthma was higher in boys (12.0%) than in girls (9.0%). For respondents who indicated experiencing wheezing or whistling in their chest within the past 12 months, a positive response was considered in determining the prevalence of current asthma symptoms. (8)

The Eastern Mediterranean Region (EMRO) bears a significant burden of asthma, with rapidly changing lifestyles and conflict zones in numerous countries contributing to its escalating prevalence. According to the International Study of Asthma and Allergies in Childhood (ISAAC) Phase III, asthma prevalence was estimated to be 10.6% in male and 7.9% in female adolescents (13-14-year-olds). (8)

The other test conducted in this survey is the Asthma Control Test (ACT) is a simple, validated measure of asthma control that can be used by clinicians and researchers to assess asthma control in patients, with or without lung function testing. The ACT contains questions about nocturnal symptoms, rescue medication use, and activity limitations. The scoring method provided by ACT is user-friendly and offers a comprehensive evaluation and plays a crucial role in assessing and refining asthma treatment approaches. (9)

In order to develop asthma programs that are based on solid data obtained from surveillance, which allows to quantify how many people have asthma, how severe it is, and how well it is controlled; The ministry of Health has several steps to achieve that goal. One of these steps is implementing this survey to study a representative sample of (13-14) year-old children from intermediate schools in Baghdad to determine the prevalence, and severity of asthma and its control.

Due to the COVID-19 pandemic and the lockdown measures implemented worldwide to limit its spread, the Ministry of Education, in conjunction with the lockdown and social distancing measures enforced throughout the country, decided to switch to online learning.

This dramatic change, while challenging and limiting in some ways, also facilitated the implementation and completion of the survey. Since the target group, 13–14-year-old school children, already had access to the internet for their lessons, it was possible to reach them through their school administrations to conduct the online survey. The decision was made to leverage this model to conduct the survey electronically, which would save money, time, and effort.

1.2 Goal and objectives

Goal

Provision of evidence-based data concerning asthma among intermediate school students to develop a national policy to control it in this age group.

Objectives

1. To determine the prevalence of asthma in 13 to 14 years children.
2. To evaluate the severity of asthma symptoms.
3. To assess the level of asthma control.

Official and ethical approval

4. Official approval was obtained from the Technical Deputy Minister of Health to implement the survey (Annex 1).
5. Official approval was obtained from the Minister of Education to implement the survey.
6. Passive consent was taken from the students/parents before enrolling in the electronic questionnaires.

2. Materials and Methods

2.1. Site of study:

The survey was conducted in Baghdad, which has six administrative education directorates, three in Al-Karkh and three in Al-Russafa.

The total number of intermediate schools distributed to these directorates is 985.

2.2. Sample frame:

The sample frame for the survey consisted of male and female students attending public secondary and intermediate schools in both urban and rural areas of the Baghdad governorate. The names of the participating schools were obtained from lists provided by the Ministry of Education. Private and religious schools were excluded.

Inclusion criteria

- Students must be in grade 2 of intermediate school.
- Students must be between 13 and 14 years old.

2.3 Study design

2.3.1 Sampling

This cross-sectional survey was conducted among 13–14-year-old intermediate school students in all six educational directorates on both sides of Baghdad city. A multi-stage cluster sampling technique was used to select the minimum representative sample size to estimate the prevalence of wheeze and asthma. The selected schools and then classes were selected randomly depending on the role of population proportional size provided in the population frame.

A total of 145 clusters (classes) were randomly selected from the randomly included schools, which were the primary sampling units (PSU).

The six educational directorates were addressed as the strata of this survey.

2.3.2 Primary Sampling Units (PSU)

The Primary sampling units (PSUs) were the selected grades from which the students have been selected.

2.3.3 The stratum

The Primary sampling units (PSUs) were the randomly determined classes from which the students had been selected.

2.3.4 Sample size

The aim is to detect difference and variance, if it exists, which is meaningful clinically, epidemiologically, economically, and for health service delivery.

The sample size required to detect differences in the severity of asthma is higher than that required to detect the same magnitude of differences in the prevalence of asthma because severe asthma is less common. The sample size estimates are stringent because of the number of hypotheses being tested and the need to be certain of the results in such a major study.

The sample size of the current survey was calculated using the following formula:

$$n = [(Z^2 * (q)/d^2)/1+(Z^2 * (q)/d^2N) RR] * S$$

$$n = [((1.96)^2 * 0.5 (0.5)/ (0.05)^2)/ 1 + ((1.96)^2 * 0.5 (0.5)/ (0.05)^2*147612) *0.8] *6 n= 2874 \cong 2900$$

Level of Confidence Measure (Z): 1.96 (for 95% confidence level) Margin of Error (E): 0.05
Baseline levels of prevalence (P): 0.5 (percentage of students exposed, default) RR: expected response rate= 80% S: Number of stratum =6 and N: Population = 147612.

The total sample size was 2900 and as each class contains 20 students on average (due to social distancing as a result of the COVID-19 pandemic), the number of the clusters is 145.

2.3.5 Data weighting (Adjustment)

Data weighting (Adjustment) is essential to overcome the difference encountered in the sample proportions among strata to represent the target population. In order to have weighted indicators, the sample of (2900) has been distributed to the educational directorates in Baghdad, proportionate to the number of the students in these directorates. The formula of data weighting is the reverse of total probability of choosing the students from the total population in the same grades, as following:

$$W=1/P1*P2$$

W is the raw weight for the data.

P1 Proportion of students' number in the selected class to the total number of students in other classes of the same grades in the selected school.

P2 Probability of the total number of students in grades in the selected school to the total number of the students in the same grade in the educational sector.

2.4 Survey preparation

2.4.1 Action plan and time table.

Activities are presented in the following time table.

Time table																				
	2021											2022		2023		2024				
	1	2	3	4	5	6	7	8	9	10	11				11	12	1	2	3	
Planning Phase:																				
Establish of Technical Committee																				
Planning meetings																				
Sampling design and sample selection																				
Define survey personnel																				
Identify survey materials and supplies																				
Obtain official and ethical approval																				
Preparatory phase:																				
Nominate survey personnel																				
Establish survey operation site																				
Prepare survey e-materials																				
Central training (online)																				
Pilot test																				
Schedule data collection																				
Implementation phase																				
Data collection																				
Monitoring/supervision																				
Data check-up																				
Data entry																				
Data cleaning																				
Data analysis																				
Evaluation phase:																				
Technical workshops for discussion of results																				
Dissemination																				
Produce preliminary report																				
Launching results																				
Produce final report																				

2.4.2 Instrument of the survey (Annex 1)

2.4.2.1 Translation of Questionnaires

The researchers took great care to make sure that the questionnaire was translated accurately and appropriately for the target students. They consulted with experts, including doctors and children, to ensure that the language was clear and understandable. following the steps below : -

- The questionnaire was translated into Arabic by bilingual doctors specializing in respiratory diseases. They paid special attention to translating the word "wheezing" so that it would be clear and understandable to the target students 13-14 year olds.
- A pediatrician was consulted to learn the local wording used to describe asthma symptoms, specifically the wheezing in the chest.
- The wording was then shown to several children in that age range from different backgrounds and environments to ensure they recognized it.
- Asthmatic children were asked to briefly describe what it felt like to go through an asthma attack.
- The questionnaire was then re-translated into English, with changes made to accommodate the findings from the previous steps.
- The Arabic translation of the questionnaire was originally based on the Asthma Global Network questionnaire, which in turn was based on the ISAAC questionnaire

2.4.2.2 Study questionnaire

The **questionnaire** consisted of: -

- General information: including the names and locations of the educational directorates, schools, and students' years of birth

Standard Core questionnaire for wheezing and asthma (from Q1-Q8)

Question. 1. It does not mention “attacks” of wheezing, in order to identify children with persistent symptoms which are not obviously characterized as episodes or attacks.

Question. 2. Limitation to a 12-month period reduces errors of recall. This is considered to be the most useful question for assessing the prevalence of wheezing.

Questions 3, 4 & 5. These questions offer three alternative quantitative measures of the frequency and severity of wheezing. Problems with the concept of ‘attacks’ and difficulty in quantifying the frequency of recurrent asthma, led to the inclusion of question 5 to identify and quantify persistent wheeze. Question 5 was created to identify acute severe

asthma. These three questions were used to identify asthma severity in a comparison of asthma symptom prevalence, mortality, and hospital admissions which demonstrated correlations with all three parameters. The 12-month prevalence of moderate to severe wheezing comprised one or more of: (i) four or more attacks of wheeze; (ii) woken by wheeze on one or more nights per week or; (iii) wheezing severe enough to limit speech to only one or two words at a time, between breaths. These questions were used to define severe wheezing

Question 6.

This is the first time in the questionnaire that ‘asthma’ is mentioned. It is deliberately asked after the questions on asthma symptoms. as occasionally asthma may be diagnosed in the absence of wheeze (on the basis of recurrent nocturnal cough etc.).

Question 7.

As mentioned above in Question 6, this is question used to clarify that a doctor had confirmed that the participant had asthma.

Question 8.

This question will provide new information on these plans and will be analyzed with the prevalence and severity questions.

Question 9.

This question asks about swallowed medicines and the wording ‘(when you didn’t have a cold)’ has been added to the end of the question to reinforce that the question is asking about breathing problems without the complication of cold symptoms.

Question 10 & 11.

These questions about urgent visits for asthma in the past 12 months are essential to assess its target to decrease unplanned visits for asthma. Different patterns of medical care may contribute to variations in the severity of asthma between countries or over time. These questions along with questions 9 and 10 will allow the relationship (cross-sectional) to be explored between treatment and morbidity.

Question 12.

This question, about hospital admissions for asthma in the past 12 months.

Question 13.

This question will provide information on school absenteeism, in the past 12 months, which is an additional indicator of asthma morbidity. To assess its target to decrease time

Question 14.

This question identifies some children who deny wheezing or whistling at questions 1 or 2.

Question 15.

Nocturnal cough is widely accepted as an alternative presentation of asthma, and this question has been included to increase the overall sensitivity of the questionnaire, although its specificity in population surveys remains unclear.

Question 16.

One of the main goals of asthma therapy is to achieve and maintain good asthma control. Asthma control is best assessed using patient-reported outcomes, by using ACT questionnaires.

2.4.2.3 E-questionnaire link: <https://ee.kobotoolbox.org/x/2TrjnnSf>

2.4.3 Survey budget

Due to utilizing an online survey and electronic methods of collecting, organizing, and analyzing the data, the survey did not incur any expenses to perform.

2.4.4 Personnel (Annex 2)

2.4.4.1 Contributors

Headed by the DG of the Directorate of Public Health with membership of the directors of the non-communicable diseases department and related sections, representatives of school health sections, respiratory specialists, in addition to members from the Ministry of Education.

2.4.4.2 Central Supervision

Central supervision was performed by an operations room formed of members from the Ministry of Health and Ministry of Education for continuous supervision and to quickly address any issues that may arise.

2.4.4.3 Survey Operation Site and Data Auditing Staff: -

An operation site was set up at the Directorate of Public Health – NCD department and MOE.

Electronic recording on the Kobo toolbox online database was developed to monitor the progress of the survey.

After completing the answers to the electronic questionnaire, the student clicks the button to send all answers directly to the kobo toolbox dashboard and the operation site receives the completed questionnaire directly.

2.4.4 .4 Data monitoring

The operations room produces daily monitoring reports then the data was processed, encoded, and analyzed.

2.4.4 .5 Report writing staff

Responsible for the development of country Fact Sheet and preliminary and final report writing.

2.4.4 .6 Administrative staff

A number of staff was nominated from the Directorate of Public Health offices and NCD sections for organizing training activities, preparing the materials, printing and sending official letters and announcements, filing the survey materials, and follow-up and communication with the health directorates.

2.5 Preparatory workshops and Training activities

The first step was establishing a team with the aid of the Ministry of Education, composed of managers in environmental and health departments across the Ministry's various directorates in order to develop plans and finalize instructions. This created a focal point of contact that we could use to communicate and relay instructions quickly.

A series of Zoom meetings were held with some of the principals of the schools involved in the survey, in order to encourage commitment and collaboration efforts, in which the plan was relayed to those in charge, and it was stressed that while students are encouraged to participate in the survey, participation is optional. Moreover, there was no specific mention made of Asthma or respiratory diseases in those instructions.

After the principal of each school agrees to cooperate, they hold an informal meeting with their staff to ascertain various important points of data necessary to run the survey. The knowledge of the exact numbers of students across each school and district was instrumental in achieving a random sampling. Once again, there was no explicit mention made of Asthma when collecting this data.

2.6 Pilot test

The pilot study was conducted with 100 students from four schools in Baghdad, two in Al-Karkh and two in Al-Rusafa

2.7 Approaching the selected schools

The Ministry of Education has six directorates, three on each side of Baghdad. Each directorate has a physical activity department, which in turn has a health and school environment unit. To facilitate working with schools, the researchers established liaisons with the heads of these units, who have direct access to the principals of the schools. The six liaisons were briefed about the study and what would be required of the schools' principals during a Zoom meeting. In some cases, the research team also met with the principals face-to-face to answer any further questions. To keep the study blind, asthma was not mentioned to the contact points, school principals, or students.

Once the list of schools was finalized, the researchers created a record of the contact information for the school principals involved, as well as the dates of any face-to-face meetings. They also formed a WhatsApp group to facilitate communication. The researchers then sent each principal a link to the questionnaire and a short video explaining how to fill it out. Since direct contact was established with the principals, the researchers documented the specific dates of phone calls, messages, and other communications.

The next step was to officially approach the principals of the selected schools. Letters were written asking for their cooperation with the study and explaining their role. Letters were also written to the selected students explaining the importance of the study and encouraging them to participate.

While in contact with the principals, who acted as the primary liaison between the research group the school staff, and students, created lists of the student count, and did not keep any records of student names. Letter for schools (Annex3)

2.8 Confidentiality and letter to the students

A passive consent was obtained by adding a message to the beginning of the questionnaire that clearly stated that participation was optional and that all personal information would be confidential. Letter to students and parents (Annex 4)

2.9 Preparation of the link and video

A video tutorial was created, explaining how to open the link and answer the questions.

Link <https://youtu.be/aDrZxhfbku8>

2.10 Field Implementation of the survey

2.10.1 Distribution of the Questionnaires

The researchers chose a start date for the survey and sent the link to the liaisons. The liaisons forwarded the link to the school principals, who then distributed it to the selected classrooms through their teachers. The target group was 13–14-year-old school children, who already had internet access for their lessons, so it was easy to reach them through their schools to conduct the online survey.

2.11 Strength points, opportunities and initiatives

- An electronic survey is a very good way to gather immediate feedback, in real time, with much easier results to examine.
- The support provided by both the Ministry of Education and its various departments was vital to the implementation of the survey.
- National expertise played a big role in providing technical input and encouraging collaboration even in fields not strictly medical, such as the administrative field. The survey received substantial support from the Minister of Health and the Director General of Public Health that facilitated its implementation.
- Making use of the current spread of online education in the country to facilitate a direct line of contact between the team, school principals, and the students themselves, utilizing online communication methods that are now widespread and familiar to all sides.
- The first survey was conducted, filled, and collected entirely through electronic systems.

2.12 Limitations:

Electronic surveys have many advantages, such as being convenient, cost-effective, and easy to distribute to a large number of people. However, there are also some limitations to electronic surveys, including:

- 1- Technology access: Electronic surveys are not accessible to everyone. Some people may not have internet access.
- 2- Some students may not have easy access to a computer/smartphone.
- 3- Data security: Electronic surveys may collect sensitive personal information from respondents. It is important to take steps to protect this information from unauthorized access or use.

To minimize the limitations, and increase the accuracy and reliability of the survey, focus was made on the following:

- Use a random sampling method to select participants.
- Keep the survey short and easy to understand.
- Ask questions that are relevant to the target population.
- Pilot test the survey before distributing it to a large number of people.
- Take steps to protect the privacy and security of the data collected.

3. RESULTS

3.1 Response rate

The total sample size was 2900 aged 13–14. Out of the eligible planned sample, a total of 2835 (1521 male, 1314 female) were enrolled in the survey. Results showed a high response rate (97.8%).

3.2 Socio-demographic characteristics

Distribution of the study sample by sex shows that the proportion of male students was higher than female students (53.4 % vs. 46.6 % respectively). Most of the residence participants were from urban areas (71.3 %) (Table 3.2.1)

Table (3.2) distribution of the study sample by sex and residence		
Variables	Observations	Percent (95% CI)
Sex		
Male	1521	53.4% (51.6% - 55.2%)
Female	1314	46.6% (44.8% - 48.4%)
Residence		
Urban	2003	71.3% (54.9% - 83.5%)
Rural	832	28.7% (16.5% - 45.1%)

3.3 Wheezing

Prevalence of any history of wheezing or whistling in the chest at any time in the past; there was a higher percentage of girls than boys (10.9% vs. 9.9% respectively).

Table (3.3.1) Distribution of the respondents according to ever had wheezing or whistling in the chest at any time in the past						
Sex						
Ever had wheezing or whistling in the chest at any time in the past	Male No.	%	Female No.	%	Total No.	%
		143	9.9	140	10.9	283

However, of those who said “yes” to the above question, when considering the prevalence of any history of wheezing or whistling in the past year alone, there was no difference between boys and girls (46.6 % vs. 46.4%, respectively).

Table (3.3.2) Distribution of the respondents according to history of wheezing or whistling in the chest in the past 12 months						
	Male No.	%	Female No.	%	Total No.	%
Had wheezing or whistling in the chest in the past 12 months	66	46.6%	63	46.4%	129	46.5%

3.4 Symptom severity

Concerning symptom severity, the following questions were addressed to those who answered yes to having wheezing symptoms in the past 12 months, they describe three alternative quantitative measures of the frequency and severity of wheezing, and they were used to identify asthma severity. Those questions concern the prevalence of symptoms of severe asthma defined as ≥ 4 attacks of wheezing, or ≥ 1 night per week sleep disturbance from wheezing, or it affecting speech in the past 12 months.

About one-third (30.8%) of them had ≥ 4 attacks of wheezing in the chest in the past 12 months (31.9% of boys and 29.6%) of girls respectively).

The results showed that 34.4 % of boys and 28.8% of girls experienced disturbed sleep due to wheezing more than one night per week.

For the third question, 2.4% boys and 3.2% girls answered they experienced limited speech of only one or two words at a time between breaths in the past 12 months due to wheezing.

Table (3.4) Distribution of the respondents according to the history of wheezing or whistling in the chest in the past 12 months						
	Boys	%	Girls	%	Total	%
Number of attacks of wheezing in the past 12 months						
Never	10	15.8%	9	13.4%	19	14.6
1 - 3 times	35	52.3%	34	57.0%	69	54.6
4 - 12 times	8	12.1%	9	12.7%	17	12.4
> 12 times	13	19.8%	11	16.9%	24	18.4
Times sleep has been disturbed due to wheezing in the past 12 months						
	25	36.2%	29	47.2%	54	41.6
Less than one night/week	19	29.4%	16	24.0%	35	26.8
\geq one night/week	22	34.4%	18	28.8%	40	31.7
Has wheezing ever been severe enough to limit your speech to only one or two words at a time between breaths in the past 12 months	34	2.4%	41	3.2%	75	2.8%

3.5 Ever had Asthma

For this part, the questions were addressed to all participants. The result showed that 9% of the studied students ever had asthma with a higher percentage of girls than boys (9.8% and 8.3% respectively)

Table (3.5) Distribution of the respondents according to the history of ever had asthma						
	Male No.	%	Female No.	%	Total No.	%
Had wheezing or whistling in the chest in the past 12 months	135	8.3	129	9.8	264	9.0

3.6 Pattern of presentation

Nocturnal cough is widely accepted as an alternative presentation of asthma, the result showed that 5.5% of the students had dry cough at night (5.3% of boys and 5.7% of girls respectively).

The table shows wheezing during or after exercise in the past 12 months was higher in girls than boys (6.2% and 5.3 % respectively).

Table (3.6) Distribution of the respondents according to pattern of Presentation.						
	Boys	%	Girls	%	total	%
Had a dry cough at night, apart from a cough associated with a cold or chest infection in the past 12 months	76	5.3	75	5.7	151	5.5%
Chest sounded wheezy during or after exercise in the past 12 months	75	5.3	76	6.2	151	5.5%

3.7 Seeking Medical care

For this section, the questions were addressed to those participants who answered yes to “ever had Asthma”. The results show that 3% of the respondents reported they urgently needed to see a doctor for breathing problems without admission more than 12 times in the last 12 months. Boys more than girls. (3.5%, 2.6 respectively)

As for the times they had urgently been to an Emergency Department for breathing problems without admission in the last 12 months. 2. 6% of the respondents stated that they went more than 12 times. Again, boys more than girls. (3.6%, 1.7% respectively).

Only 1.9% of the respondents said they have been urgently admitted to the hospital for breathing problems more than twice in the last 12 months. Boys more than girls (2.5%, 1.3% respectively).

Table (3.7) Distribution of the respondents according to the pattern of Presentation.						
Variables	Boys	%	Girls	%	Total	%
Times has urgently been to a doctor for Breathing problems without admission in the last 12 months						
Never	99	73.4%	100	78.7%	199	76.1%
1 - 3 times	28	21.6%	23	16.8%	51	19.1%
4 - 12 times	3	1.5%	2	1.9%	5	1.7%
> 12 times	5	3.5%	4	2.6%	9	3.0%
Times has urgently been to an Emergency Department for Breathing problems without admission in the last 12 months						
Never	114	85.0%	110	85.6%	224	85.3%
1 - 3 times	14	9.7%	16	12.1%	30	10.9%
4 - 12 times	2	1.7%	1	0.7%	3	1.2%
> 12 times	5	3.6%	2	1.7%	7	2.6%
Times has urgently been admitted to hospital for Breathing problems in the last 12 months						
Never	115	86.0%	124	96.6%	239	91.4%
1 time	12	8.7%	2	1.1%	14	4.9%
2 times	4	2.8%	1	1.0%	5	1.9%
> 2 times	4	2.5%	2	1.3%	6	1.9%

3.8 Absentees

This table provides information on school absenteeism due to asthma, 2.6% of the respondents missed school because of breathing problems more than 12 times in the past 12 months. 2.5% for boys, 2.8% for girls respectively.

Table (3.8) Distribution of the respondents according to Absentees from school.						
Variables	Boys	%	Girls	%	Total	%
Days (or part days) of school have been missed because of breathing problems in the last 12 months						
Never	114	85.4%	103	80.0%	217	82.7%
1 - 3 times	15	10.9%	18	14.2%	33	12.6%
4 - 12 times	2	1.2%	5	3.1%	7	2.1%
> 12 times	4	2.5%	3	2.8%	7	2.6%

3.9 Asthma symptoms control

All the students who had ever had asthma were included in this analysis. Using ACT scoring, the results show that the asthma symptoms of about half (51%) of them were not controlled. This was more prevalent among boys (55.3%) than girls (46.9%).

Table (3.9) Distribution of the respondents according to Asthma control						
Variables	Boys	%	Girls	%	Total	%
Not controlled	70	55.3%	61	46.9%	131	51.0%
Controlled	65	44.7%	68	53.1%	133	49.0%

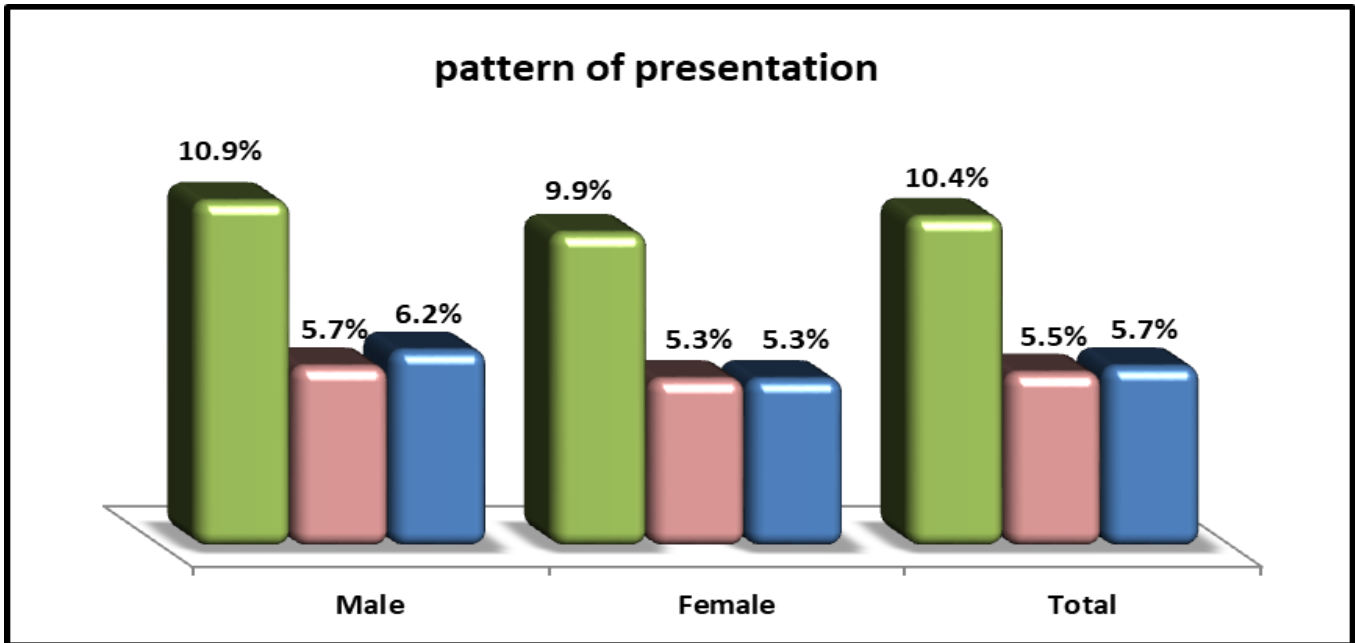


Figure 1: -This figure shows the patterns of presentation of asthma that were revealed by the survey

Figure 1

Figure 1 illustrates the patterns of presentation in the survey sample.

Ever had wheezing by 10.4% of the students, and wheezing in the chest during or after exercise was reported by 5.7% of the students.

males (6.2%) were more likely to report wheezing in the chest during or after physical activity than Females (5.3%).

A Nocturnal cough without a cold or flu was reported by 5.5% of the students.

Conclusions and Recommendation

Conclusions

- The survey found that 10.4% of students had wheezing in the chest.
- 5.7% of the students had wheezing in the chest during or after exercise, with a higher rate among boys (6.2%) than girls (5.3%).
- 5.5% of students suffered from a dry cough at night and were not suffering from a cold or flu.
- 9% of middle school students aged 13-14 years suffer from bronchial asthma, with a rate of 9.80% for girls and 8.30% for boys.
- Asthma was uncontrolled in 51% of those affected.
- Asthma caused 17.3% of those affected to miss school or their online lessons.
- There were significant sex differences in asthma prevalence, with males more likely to wheeze ever and females more likely to have asthma.

Recommendations

- Expanding the survey to all health departments and education directorates.
- Adopt the asthma-friendly schools project, through schools to help students with asthma overcome the disease and reduce its effects on them by achieving the conditions and specifications that suit these patients in their environment and systems.
- Hold regular meetings between the Ministry of Health and the Ministry of Education to plan and execute these recommendations on a wide scale and prepare all that would be necessary on both sides.

List of abbreviation :

ISAAC	International Study of Asthma and Allergies in Childhood
COVID-19	Coronavirus disease 2019
GINA	Global Initiative for Asthma
EMRO	Eastern Mediterranean Region
ACT	Asthma Control Test
PSUs	Primary sampling units
DG	Directorate General

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السيد الوكيل الفني المحترم
الموضوع / مقترح مسح معدل انتشار الربو بين طلاب المدارس والسيطرة عليه للعام
الدراسي ٢٠١٨-٢٠١٩

السلام عليكم ورحمة الله وبركاته
المعروض

لغرض اعداد قاعدة بيانات وطنية لمعدلات انتشار الربو لدى طلاب المدارس وتقييم مدى سيطرة
المشخصين على اعراض ومضاعفات المرض لتمكينهم من السيطرة عليه وتفاذي حصول مضاعفات
حادة محتملة في الجهاز التنفسي وتحسين نوعية الحياة تم ماياتي :-

- ١-حصلت موافقة سيادتكم على مطالعتنا ذات العدد د.ص.ع/١١/١٣ /٢١٧٩ في
٢٠١٨/١١/٢١ والمتضمنة تنفيذ مسح معدل انتشار الربو بين طلاب المدارس والسيطرة عليه
لعينة من طلاب المدارس المتوسطة في دائرتي صحة بغداد الرصافة والكرخ خلال النصف الثاني
من العام الدراسي (٢٠١٨ - ٢٠١٩) والتي تتراوح اعمارهم بين (١٣ - ١٤ سنة) في بغداد وقياس
درجة السيطرة على الربو للمرضى المكتشفين خلال المسح ومن ميزانية دائرتنا / فصل البرامج /
برنامج السيطرة على الامراض غير الانتقالية.
- ٢- كان من المزمع تنفيذ دراسة تأثير الحقائق على الجهاز العضلي والعظمي لعينة من طلاب
المدارس الابتدائية خلال الفصل الاول من العام الدراسي ٢٠١٨-٢٠١٩، ولاسباب مالية وتنظيمية
تم تاجيل الموعد ليكون خلال الفصل الثاني من العام الدراسي ٢٠١٨-٢٠١٩، حيث تم استكمال
العمل الميداني بعد انتهاء العطلة الربيعية ولا يزال العمل مستمر لحد اليوم.
- ٣- نظرا لشمول المشرفين المحليين في دائرة صحة بغداد الكرخ والرصافة من شعبة الامراض غير
الانتقالية والصحة المدرسية والباحثين الميدانيين في دراسة الحقائق في الوقت الحالي مما يتعذر
تنفيذ مسح الربو في نفس الفترة الزمنية.

الرأي

تفضل سيادتكم بالاطلاع وان نسبتم الموافقة على تاجيل تنفيذ المسح حول الربو في مدارس دائرتي
صحة بغداد الرصافة والكرخ ليكون خلال العام الدراسي ٢٠١٩-٢٠٢٠ وعلى نفقة دائرتنا من
ميزانية فصل البرامج / برنامج الوقاية والسيطرة على الامراض غير الانتقالية.

مع الاحترام

الدكتور
رياض عبد الأمير حسين
المدير العام
٢٠١٩ / ٣ / ١٨

موافقة
حازم عبد الرزاق الجميلي
المستشار
الوكيل الفني / وكالة

السيد الوكيل الفني المحترم

الموضوع / مقترح مسح معدل انتشار الربو بين طلاب المدارس والسيطرة عليه للعام

الدراسي ٢٠١٨ - ٢٠١٩

السلام عليكم ورحمة الله وبركاته
المعروض

يعتبر الربو القصيبي من اكثر اضطرابات الجهاز التنفسي المزمنة شيوعا وان انتشاره في تزايد في جميع أنحاء العالم خلال العقود الأخيرة ، وهو يمثل عبئا كبيرا على العائلات والمجتمعات ، لا سيما في الأطفال ويترتب عليه عدد من الأيام الدراسية المفقودة وقد يحرم الأطفال من التعليم والتفاعل الاجتماعي، وايضا يشكل ضغطا على الرعاية الصحية نتيجة زيارات الطبيب والمستشفيات وتكاليف العلاج.

ان معدلات الانتشار تختلف داخل البلدان وبينها وتتراوح معدلات الانتشار بين (١.٦٪ - ٣٦.٨٪). وفقاً لتقديرات منظمة الصحة العالمية ، هناك ٢٣٥ مليون شخص يعانون من الربو وأكثر من ٨٠٪ من وفيات الربو تحدث في البلدان ذات الدخل المنخفض والدخل المتوسط الأدنى، تتراوح معدلات الانتشار اقليميا بين ٥.٦٪ في السعودية و ٨.٥٪ في الكويت، ولكن للأسف لا يوجد ضمن البيانات المنشورة معدلات انتشار الربو في العراق او السيطرة على الربو ، اظهر مسح عوامل الخطورة للأمراض غير الانتقالية ٢٠١٥ وجود ٢.٢٪ من الحالات المشخصة بالربو عن طريق التاريخ المرضي. ضمن المنجزات المتحققة في مجال الرعاية الأولية للأمراض التنفسية المزمنة تم ادراج الرعاية الأولية للربو والوقاية من تفاقم الامراض التنفسية المزمنة ضمن الهدف الثاني من الاستراتيجية الوطنية للوقاية والسيطرة على الامراض غير الانتقالية حيث تم ما يأتي:-

١- إعداد دليل تشخيص وعلاج الربو في مراكز الرعاية الصحية الأولية تم تحديث دليل الربو الحالي ليصبح دليل الأمراض التنفسية المزمنة ليشمل الربو لكافة المراحل العمرية و الأمراض التنفسية الانسدادية المزمنة .

٢- البدء بمشروع الرعاية الأولية للربو من خلال الاعمام الى دوائر الصحة كافة لغرض تسمية خمس مراكز رعاية صحية اولية وبمعدل مركز صحي في كل قطاع لتتقدم حزمة الخدمات الاساسية للأمراض غير الانتقالية وبضمنها الرعاية الأولية للربو.

٣- إعداد سياقات العمل واستمارة الرعاية الأولية للأمراض التنفسية المزمنة.

٤- تدريب مدراء الشعب في دوائر الصحة على السياقات ودليل العمل.

٥- تدريب مشغلي الاجهزة في بعض دوائر الصحة التي تتوفر فيها الاجهزة وحسب جدول زمني.

٦- شراء اجهزة التشخيص والمتابعة والتي تشمل جهاز السبايرومتر (spirometer) و (PEFM) جهاز ذروة التدفق الزفيري في احدى عشر دائرة صحة.

٧- تدريب مدراء شعب الامراض غير الانتقالية وطبيب اختصاص امراض صدرية وتنفسية من كل دائرة صحة حول سياقات العمل والمستجدات في علاج الربو وطريقة استعمال جهاز السبايرومتر وقراءة التقارير وطريقة استعمال جهاز قياس ذروة التدفق الزفيري.



لغرض المقارنات الإقليمية للربو قامت الدراسة الدولية للربو والحساسية في الطفولة (ISAAC International Study of Asthma and Allergy in Childhood) بصياغة استبيان قياسي لجمع البيانات حول مدى انتشار وشدة الربو وبهذا تكون اسست طريقة موحدة وسهلت التعاون الدولي وزيادة الموثوقية مع إنشاء بروتوكول يستخدم في جميع أنحاء العالم. من ماتقدم ظهرت الحاجة الى تنفيذ مسح للحصول على بيانات احصائية وطنية لمعدلات الانتشار وتقييم مدى سيطرة المشخصين على اعراض ومضاعفات المرض لتمكينهم من السيطرة عليه وتقادي حصول مضاعفات حادة محتملة في الجهاز التنفسي وتحسين نوعية الحياة حيث أنه بإمكان المرضى السيطرة على الربو إذا تم تشخيص حالتهم بشكل صحيح واتبعوا مشورة محددة من الأطباء حول كيفية التعامل مع المرض لتخفيف التفاقمات عند وقوعها.

الرأي:-

تفضل سيادتكم بالاطلاع وان نسبتم الموافقة على تنفيذ المسح لعينة من طلاب المدارس المتوسطة في دائرتي صحة بغداد الرصافة والكرخ خلال النصف الثاني من العام الدراسي (٢٠١٨-٢٠١٩) والتي تتراوح اعمارهم بين (١٣ - ١٤ سنة) في بغداد وقياس درجة السيطرة على الربو للمرضى المكتشفين خلال المسح ومن ميزانية دائرتنا / فصل البرامج / برنامج السيطرة على الامراض غير الانتقالية.

مع الاحترام

موافق
عازم
١١/١١/٢٠١٨

الدكتور
حازم عبد الرزاق الجميلي
الوكيل الفني / وكالة

الدكتور
رياض عبد الامير حسين
المدير العام
٢٠١٨/١١/٢٠

1 - هل كان عندك صفير في الصدر في اي وقت مضى(سابقا)؟

نعم كلا

إذا كان لديك إجابة "لا" يرجى الانتقال إلى السؤال 6

2 - هل كان لديك صفير في الصدر خلال ال 12 شهرا الماضية؟

نعم كلا

إذا كان لديك إجابة "لا" يرجى الانتقال إلى السؤال 6

3- كم عدد المرات/ النوبات التي عانيت فيها من الصفير في الصدر خلال ال 12 شهرا الماضية؟

ولا مرة

1 إلى 3 مرة

4 إلى 12 مرة

أكثر من 12 مرة

4- خلال 12 شهر الماضية كم مرة كمعدل تم إزعاج نومك بسبب الصفير او (استيقضت في الليل بسبب الصفير في الصدر) ؟

ولا مرة استيقضت من النوم ليلا بسبب الصفير

أقل من ليلة واحدة في الأسبوع

ليلة أو أكثر في الأسبوع

5- خلال 12 شهر الماضية هل كانت نوبات الصفير شديدة بحيث تمنعك من الكلام او تجعلك لا تستطيع اكمال الجملة ,تقول فقط كلمة واحدة او كلمتين وتأخذ بينهما نفس؟

نعم كلا

6- هل سبق لك الاصابة بالربو او (حساسية القصبات)؟

نعم كلا

7 - هل أكد الطبيب تشخيص الربو (او حساسية القصبات) ؟

نعم كلا

8- هل استخدمت أي نوع من أدوية البخاخات للمساعدة وعلاج مشاكل التنفس او صعوبة لديك في أي وقت خلال الاثني عشر شهراً الماضية؟ (ولم تكن مصاب الزكام او الانفلونزا)

نعم كلا

9- هل استخدمت أي نوع من الحبوب او الكبسول او الشرابيات للمساعدة وعلاج مشاكل او صعوبة التنفس لديك في أي وقت خلال الاثني عشر شهراً الماضية؟ (ولم تكن مصاب الزكام او الانفلونزا)

نعم كلا

10 - خلال الاثني عشر شهراً الماضية ، كم مرة ذهبت إلى الطبيب بشكل عاجل(حالة طارئة) بسبب مشكلة او صعوبة في التنفس.

ولامرة

1-3

4-12

اكثر من 12 مرة

11- خلال الاثني عشر شهراً الماضية ، كم مرة ذهبت فيها بشكل عاجل إلى الطوارئ في المستشفى بسبب مشاكل او صعوبة في التنفس؟

ولامرة

1-3

4-12

اكثر من 12 مرة

12- في الاثني عشر شهراً الماضية ، كم مرة دخلت المستشفى (المبيت في الردهة) بسبب مشاكل او صعوبة التنفس؟

ولامرة

مرة واحدة

مرتان

13- خلال الاثني عشر شهرًا الماضية ، كم يومًا تغيبت عن المدرسة او عن الدروس (او عن الدروس الالكترونية) بسبب مشاكل او صعوبة التنفس؟

ولامرة

1-3

4-12

اكثر من 12 مرة

14 - خلال ال 12 شهر الماضية، هل تسمع صوت صفير في الصدر خلال او بعد التمارين الرياضية ؟

كلا

نعم

15 - في الأشهر ال 12 الماضية، هل كان لديك سعال جاف في الليل ولم تكن مصاب بالزكام (او انفلونزا) او التهاب في الصدر ؟

كلا

نعم

السيد مدير المدرسة المحترم

السيد مرشد الصف الثاني المتوسط المحترم

الموضوع / دراسة بحثية

تحية طيبة

بالتعاون بين وزارة التربية ووزارة الصحة يتم تنفيذ دراسة الكترونية لعينة من المدارس المتوسطة في بغداد للعام الدراسي 2020-2021

هدف الدراسة :- دراسة اعراض معينة لغرض اعداد الخطط الصحية لتحسين صحة الطلبة تم اجراء دراسات مماثلة في العديد من الدول المجاورة وفي العالم خلال الاعوام الماضية

الفئة المشمولة :- عينة مختارة من طلاب الصف الثاني المتوسط

نوع الاستبيان :- الكتروني عن طريق الرابط الالكتروني والادخال يكون تلقائي بعد اكمال الاستبيان

ندعو بعض الطلاب في مدرستكم للمشاركة في دراسة مهمة حول وجود اعراض معينة، حيث تم اختيار عينة من المدارس ضمن كل مديريات التربية في بغداد

سرية المعلومات :- ستبقى المعلومات الشخصية سرية وتستخدم البيانات لأغراض البحث فقط

الدور المطلوب من المدارس المشمولة بالدراسة

- 1- ارسال الرابط الى ارقام هواتف الطلاب او اولياء أمورهم من طلاب الشعب المختارة
- 2- ارشاد كل طالب مشمول الى اسم المديرية لسهولة ملء الاستبيان
- 3- تشجيع الطلاب على المشاركة بالاستبيان علما ان المشاركة اختيارية وليست اجبارية

الرسالة الموجهة للطلاب والتي ستظهر عند فتح الرابط :-

عزيزتي الطالبة / عزيزي الطالب

يتم الان تنفيذ دراسة مهمة حول وجود اعراض تنفسية لدى طلاب المدارس المتوسطة من الذين تتراوح اعمارهم بين 13 و 14 سنة.

تم اختيارك ضمن مجموعة من طلاب الصف الثاني المتوسط عن طريق القرعة.

المشاركة في الاستبيان اختيارية وليست اجبارية.

المعلومات ستبقى سرية ولن يظهر اسمك أو صفك في النتائج

نشكر تعاونك معنا

(Annex 2)

المساهمون في تنفيذ المسح من وزارة الصحة :-

- الدكتور رياض عبد الامير الحلبي / مدير عام دائرة الصحة العامة
- الاستاذ الدكتور باسل فوزي جميل الجسار/ طبيب استشاري امراض صدرية وتنفسية /دائرة مدينة الطب
- دكتورة منى عطا الله خليفة علي / طبيب استشاري / مديرة قسم الوقاية والسيطرة على الامراض غير الانتقالية / دائرة الصحة العامة
- دكتورة ندى عبد الوهاب موسى / طبيب استشاري / قسم الوقاية والسيطرة على الامراض غير الانتقالية / دائرة الصحة العامة
- دكتور هشام جاسم عبد/ قسم الوقاية والسيطرة على الامراض غير الانتقالية/ دائرة الصحة العامة
- دكتورة علا شاكرا فاضل / قسم الوقاية والسيطرة على الامراض غير الانتقالية/ دائرة الصحة العامة
- دكتورة اروى عبد الخالق / قسم الصحة الانجابية وصحة الاسرة / دائرة الصحة العامة
- دكتورة بشار محمد هوبي / قسم الوقاية والسيطرة على الامراض غير الانتقالية / دائرة الصحة العامة

ادارة البيانات و تحليلها

- دكتور هشام جاسم عبد/ قسم الوقاية والسيطرة على الامراض غير الانتقالية/ دائرة الصحة العامة

غرفة العمليات

- د. هشام جاسم عبد قسم الوقاية والسيطرة على الامراض غير الانتقالية / دائرة الصحة العامة
- د. علا شاكرا فاضل / قسم الوقاية والسيطرة على الامراض غير الانتقالية / دائرة الصحة العامة
- السيد حسن محمد محمد رضا / قسم الوقاية والسيطرة على الامراض غير الانتقالية / دائرة الصحة العامة

كتابة تقرير المسح

- د. علا شاكرا فاضل / قسم الوقاية والسيطرة على الامراض غير الانتقالية / دائرة الصحة العامة
- د. هشام جاسم عبد قسم الوقاية والسيطرة على الامراض غير الانتقالية / دائرة الصحة العامة
- الاستاذ الدكتور باسل فوزي جميل الجسار/ طبيب استشاري امراض صدرية وتنفسية /دائرة مدينة الطب
- مروان فيصل محسن / احصائي اقدم / وحدة الرعاية الاساسية للامراض التنفسية المزمنة

مراجعة التقرير

- د. ندى عبد الوهاب موسى / طبيب استشاري / قسم الوقاية والسيطرة على الامراض غير الانتقالية / دائرة الصحة العامة

اعداد وتنفيذ وتصميم التقرير

- مروان فيصل محسن / احصائي اقدم / وحدة الرعاية الاساسية للامراض التنفسية المزمنة
- عبد الرحمن عماد حسين / تقني بصريات / شعبة الصحة العينية والوقاية من العمى

المساهمون في تنفيذ المسح من وزارة التربية :- مركز الوزارة

- د.نجلة رؤوف / مديرية التربية البيئية والصحة المدرسية / وزارة التربية
- الاستاذ اسامة محمد يوسف / مديرية التربية البيئية والصحة المدرسية / وزارة التربية
- الست زينب عبد الحافظ / مديرية التربية البيئية والصحة المدرسية / وزارة التربية

مديريات التربية

مديريات الكرخ

- الست سعاد عليوي رخم / مديرية تربية الكرخ الاولى / وزارة التربية
- الاستاذ حسين وداعة كاظم مديرية تربية الكرخ الاولى / وزارة التربية
- الاستاذ فاضل عبد الائمة حسن / مديرية تربية الكرخ الثانية / وزارة التربية
- الست بيداء ياسين سلطان / مديرية تربية الكرخ الثانية / وزارة التربية
- الاستاذ عمار نعمة حميد / مديرية تربية الكرخ الثالثة
- الأستاذ مصطفى توفيق مدير الوحدة / مديرية تربية الكرخ الثالثة

مديريات الرصافة

- الاستاذ محمد خضر مطلق / مديرية تربية الرصافة الثانية / وزارة التربية
- الست شيرين عبود حسن / مديرية تربية الرصافة الثانية / وزارة التربية
- الاستاذ ماجد حسن حسين / مديرية تربية الرصافة الثانية / وزارة التربية
- الست اسيل جاسب محمد / مديرية تربية الرصافة الاولى / وزارة التربية
- الاستاذ احمد محمد / مديرية تربية الرصافة الاولى / وزارة التربية
- الاستاذ جمال علي واجد / مديرية تربية الرصافة الثالثة / وزارة التربية

اسماء مدراء المدارس في بغداد / الرصافة

اسم المدير	أسماء المدارس
	الرصافة الاولى
فرحان فرج	متوسطة الجندي الباسل للبنين
حسن علي كامل	متوسطة بلال الحبشي للبنين
عامر جمعة ظاهر	مدرسة الحريري الاساسية للبنات
	الرصافة الثانية
أنعام خلف راضي	المكاسب الاساسية للبنات
سناء رهيف مفتاح	ثانوية الباقيات الصالحات للبنات
أحمد عبد علي	متوسطة الحكمة للبنين
علاوي حسين نعمة	متوسطة الخالصة للبنين
أخلاص رائد عبد النبي	متوسطة السناء للبنات
بشار حاشوش ناصر	متوسطة المجتبي للبنين
سعدون عباس دلهي	متوسطة المعراج للبنين
سندس أمين حسين	متوسطة المها للبنات
أسعد رحمة زاجي	متوسطة بدر شاكر السياب للبنين
	الرصافة الثالثة
حسن زوير جابر	متوسطة الانطلاق للبنين
وسام ضمخليفة	متوسطة الفجر الجديد للبنين
كفاية حميد حبيب	متوسطة الكوثر للبنات
علي حسين عباس	متوسطة النجباء للبنين
عواطف عبد الزهرة دكتور	متوسطة اليرموك للبنات
منى علي حسين	متوسطة ايلاف للبنات
بتول علي حسين	متوسطة ذات السلاسل للبنات
ماجدة خضر أحمد	متوسطة سكيمة للبنات
هيثم صباح حسين	متوسطة قائم ال محمد للبنين
حامد مزعل غضيب	متوسطة لشهيد حسين السويدي للبنين

اسماء مدراء المدارس في بغداد / الكرخ

اسم المدير	أسماء المدارس
	الكرخ الاولى
أحمد ناظم هاشم	ثانوية الشباب للبنين
حنان عبد الأمير	ثانوية الوثبة للبنات
علياء حسن علي	ثانوية حطين للبنات
عبد الرحيم حربي حسن	متوسطة المستقبل للبنين
أحمد عبد الستار عبد الهادي	متوسطة الوثبة للبنين
رنا رعد يوسف	متوسطة ام البنين للبنات
جمال حسين مصطفى	متوسطة سيويه للبنين
	الكرخ الثانية
رقية جعفر علوان	متوسطة الاعتدال للبنات
لينا رشيد عباس	متوسطة الحوراء للبنات
حسن عباس لفته	متوسطة السراج للبنين
أحمد مجيد صالح	متوسطة اور للبنين
ماجدة منشد عبد الله	متوسطة حفصه للبنات
علاء عبد الحميد	متوسطة زين العابدين للبنين
سحر حياوي كريم	متوسطة عطارد للبنات
	الكرخ الثالثة
محمد عبد جاسم	ثانوية الجواهري للبنين
عدنان كامل عبد	ثانوية المقداد بن عمرو للبنين
أنوار فاضل علوان	ثانوية الوفاق للبنات
حسين مجيد حمادي	متوسطة الباقر للبنين
علاهن هاني مساري	متوسطة التقدم للبنات
فلاح جبار بدن	متوسطة عمار بن ياسر للبنين

اسماء المدارس المشمولة في جهة بغداد / الكرخ

اسم المدرسة	المديرية
ثانوية الوثبة للبنات	الكرخ الأولى
ثانوية حطين للبنات	
متوسطة ام البنين للبنات	
ثانوية الشباب للبنين	
متوسطة المستقبل للبنين	
متوسطة الوثبة للبنين	
متوسطة سيويه للبنين	
متوسطة حفصة للبنات	الكرخ الثانية
متوسطة عطار د للبنات	
متوسطة الاعتدال للبنات	
متوسطة الحوراء للبنات	
متوسطة اور للبنين	
متوسطة السراج للبنين	
متوسطة زين العابدين للبنين	
ثانوية الوفاق للبنات	الكرخ الثالثة
متوسطة التقدم للبنات	
متوسطة الباقر للبنين	
ثانوية المقداد بن عمرو للبنين	
ثانوية الجواهري للبنين	
متوسطة عمار بن ياسر للبنين	

اسماء المدارس المشمولة في جهة بغداد / الرصافة

اسم المدرسة	المديرية
مدرسة الحريري للبنات	الرصافة الأولى
متوسطة الجندي الباسل للبنين	
متوسطة بلال الحبشي للبنين	
متوسطة الكوثر للبنات	الرصافة الثانية
متوسطة اليرموك للبنات	
متوسطة ايلاف للبنات	
متوسطة ذات السلاسل للبنات	
متوسطة سكينه للبنات	
متوسطة الفجر الجديد للبنين	
متوسطة النجباء للبنين	
متوسطة قائم ال محمد للبنين	
متوسطة حسين السويدي للبنين	
متوسطة الانطلاق للبنين	
متوسطة المكاسب الاساسية للبنات	الرصافة الثالثة
ثانوية الباقيات الصالحات للبنات	
متوسطة السناء للبنات	
متوسطة المها للبنات	
متوسطة الحكمة للبنين	
متوسطة المجتبي للبنين	
متوسطة الخالصة للبنين	
متوسطة المجد للبنين	
متوسطة المعراج للبنين	
متوسطة بدر شاكر السياب للبنين	