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Research Article

**THE EFFECT OF MEDICATIONS IN ALLEVIATING THE  
SEVERITY OF COLD****Majed.F.Alharthi<sup>1</sup>, Khaled.A.Alrehaili<sup>2</sup>, Bashaer.S.Basulaiman<sup>3</sup>, Faisal.A.Alwadani<sup>4</sup>,  
Waseem.A.Jeddawi<sup>5</sup>**Pharmacist technician at primary healthcare center in Al-Awali<sup>1</sup>Pharmacist technician at Al-Amal Mental Health complex in Medina<sup>2</sup>Pharmacist at East Jeddah Hospital in Jeddah<sup>3</sup>Pharmacist at king Abdulaziz Hospital in Jeddah<sup>4</sup>Pharmacist technician at primary healthcare center in Al-Nawariah<sup>5</sup>**Abstract:**

*The aim of the current study is, What are the symptoms of the common cold that affect humans, what are the methods of treating the common cold, and what are the instructions of the treating physician for those suffering from the common cold., the questionnaire was created electronically via the Google Drive program, and then it was distributed via mobile phone on the social networking program (WhatsApp)? Using e-mail for all participants to respond to the questionnaire. 600 questionnaires were distributed to all mobile groups, and 550 questionnaires were received on the researcher's e-mail. (The target group is residents of the Holy City of Mecca, aged 25-60 years).*

**Keywords:** effect, medications in alleviating, the severity of cold

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## 1-INTRODUCTION:

The common cold or the cold is a viral infectious disease of the upper respiratory tract that primarily affects the respiratory mucosa of the nose, throat, sinuses, and larynx.<sup>(1)(2)</sup> Signs and symptoms may appear fewer than two days after exposure to the virus.<sup>(1)</sup> These may include coughing, sore throat, runny nose, sneezing, headache, and fever.<sup>(3)(4)</sup> People usually recover in seven to ten days,<sup>(3)</sup> but some symptoms may last up to three weeks.<sup>(5)</sup> Occasionally, those with other health problems may develop pneumonia.<sup>(3)</sup> Well over 200 virus strains are implicated in causing the common cold, with rhinoviruses, coronaviruses, adenoviruses and enteroviruses being the most common.<sup>(6)</sup> They spread through the air during close contact with infected people or indirectly through contact with objects in the environment, followed by transfer to the mouth or nose.<sup>(3)</sup> Risk factors include going to child care facilities, not sleeping well, and psychological stress.<sup>(1)</sup> The symptoms are mostly due to the body's immune response to the infection rather than to tissue destruction by the viruses themselves.<sup>(7)</sup> The symptoms of influenza are similar to those of a cold, although usually more severe and less likely to include a runny nose.<sup>(1)(8)</sup> The common cold is the most frequent infectious disease in humans.<sup>(9)</sup> Under normal circumstances, the average adult gets two to three colds a year, while the average child may get six to eight.<sup>(2)(10)</sup> Infections occur more commonly during the winter.<sup>(3)</sup> These infections have existed throughout human history.<sup>(11)</sup> The common cold is an infection of the upper respiratory tract which can be caused by many different viruses. The most commonly implicated is a rhinovirus (30–80%), a type of picornavirus with 99 known serotypes.<sup>(12)</sup> Other commonly implicated viruses include adenoviruses, enteroviruses, parainfluenza and RSV.<sup>(13)</sup> Frequently more than one virus is present.<sup>(14)</sup> In total, more than 200 viral types are associated with colds.<sup>(4)</sup> The viral cause of some common colds (20-30%) is unknown.<sup>(13)</sup> The distinction between viral upper respiratory tract infections is loosely based on the location of symptoms, with the common cold affecting primarily the nose (rhinitis), throat (pharyngitis), and lungs (bronchitis).<sup>(2)</sup> There can be significant overlap, and more than one area can be affected.<sup>(2)</sup> Self-diagnosis is frequent.<sup>(4)</sup> Isolation of the viral agent involved is rarely performed,<sup>(14)</sup> and it is generally not possible to identify the virus type through symptoms.<sup>(4)</sup> The only useful ways to reduce the

spread of cold viruses are physical measures<sup>(16)</sup> such as using correct hand washing technique and face masks; in the healthcare environment, gowns and disposable gloves are also used.<sup>(16)</sup> Isolation or quarantine is not used as the disease is so widespread and symptoms are non-specific. There is no vaccine to protect against the common cold.<sup>(17)</sup> Vaccination has proven difficult as there are many viruses involved and they mutate rapidly.<sup>(16)(17)</sup> Creation of a broadly effective vaccine is, therefore, highly improbable.<sup>(18)</sup> regular hand washing appears to be effective in reducing the transmission of cold viruses, especially among children.<sup>(19)</sup> Whether the addition of antivirals or antibacterial to normal hand washing provides greater benefit is unknown.<sup>(19)</sup> Wearing face masks when around people who are infected may be beneficial; however, there is insufficient evidence for maintaining a greater social distance.<sup>(19)</sup> It is unclear whether zinc supplements affect the likelihood of contracting a cold.<sup>(20)</sup> Routine vitamin C supplements do not reduce the risk or severity of the common cold, though they may reduce its duration.<sup>(21)</sup> Getting plenty of rest, drinking fluids to maintain hydration, and gargling with warm salt water are reasonable conservative measures.<sup>(22)</sup> Much of the benefit from symptomatic treatment is, however, attributed to the placebo effect.<sup>(23)</sup> As of 2010, no medications or herbal remedies had been conclusively demonstrated to shorten the duration of infection.<sup>(24)</sup>

## 2-MATERIAL AND METHODS:

The study started in (the holy city of Mecca in Saudi Arabia), began writing the research and then recording the questionnaire in July 2023, and the study ended with data collection in November 2023. The researcher used the descriptive analytical approach that uses a quantitative or qualitative description of the social phenomenon (The effect of medications in alleviating the severity of cold). This kind of study is characterized by analysis, reason, objectivity, and reality, as it is concerned with individuals and societies, as it studies the variables and their effects on the health of the individual, society, and consumer, the spread of diseases and their relationship to demographic variables such as age, gender, nationality, and marital status. Status, occupation<sup>(25)</sup>, And use the Excel 2010 Office suite histogram to arrange the results using: Frequency tables Percentages<sup>(26)</sup>. A questionnaire is a remarkable and helpful tool for collecting a huge amount of data, however, researchers were not able to personally

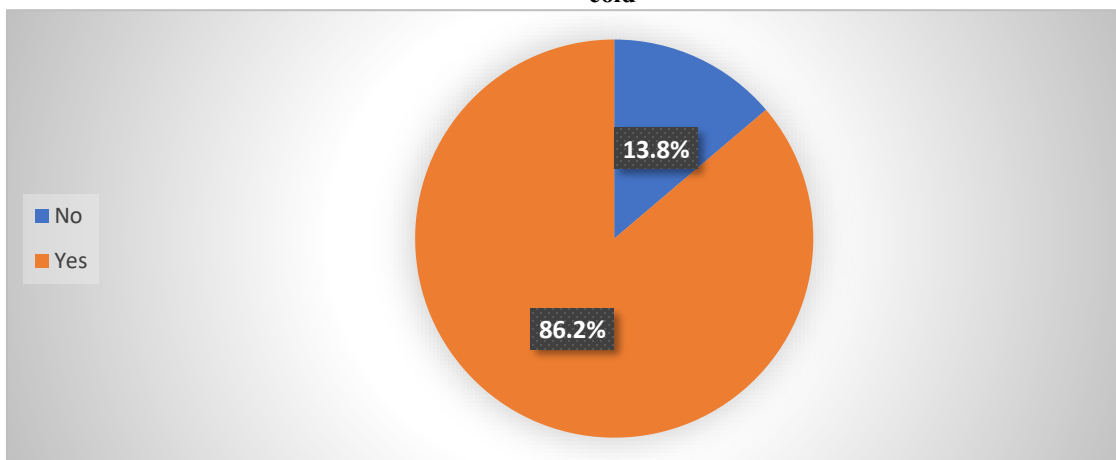
interview participants on the online survey, due to social distancing regulations at the time to prevent infection between participants and researchers and vice versa (not coronavirus participation completely disappearing from society). He only answered the questionnaire electronically, because the questionnaire consisted of ten questions, all of which were closed. The online approach has also been used to generate valid samples in similar studies in Saudi Arabia and elsewhere <sup>(27)</sup>

### 3- RESULTS AND DISCUSSION:

The total percentage of approval to participate in the research questionnaire was 99.2%, and the percentage of those who refused was 0.8%. The percentage of participants' ages was 25-55 years as follows: 25-34 years, 21.3%, 35-44 years, 51.2%, 45-55 years, 25.2%. In terms of their gender, the percentage of males was 94.4%, and the percentage of females was 5.6%. As for the nationality of the participants, they were 96.9% Saudis and 3.1% non-Saudis. As for the status of their professions, it was as follows: student, self-employed, housewife, entrepreneur (the same percentage, all 0.5%), government employee 94.5%, private sector employee 3.5%. As for their educational status, it was as follows: middle school 0.5%, secondary school 2%, diploma 42.9%, university 38.1%, master's 11.1%, doctorate 5.4%. As for distributing the questionnaire to the participants and their responses to it, their answers were (yes first) as follows: The first question: What accompanies colds, stuffy and runny nose sneezing - watery eyes? Yes 99.2% and no 0.8%. The second question about the common cold is a viral infection of the upper respiratory tract, which is more common among humans? Yes 100% and no 0%. The third question: Most people recover from colds within a week to 10 days, and do they last longer with

smokers? Yes 95.3% and no 4.7%. The fourth question is about who is most susceptible to the following colds: nasal congestion - feeling of pressure in the sinuses - runny nose - stuffy nose - loss of sense of smell or taste - sneezing - watery or mucous nasal secretions - mucous secretions at the end of the nose at the throat? 99.2% or 0.8%. The fifth question: what are the following symptoms of a head infection (cold): watery eyes - headache - sore throat - pain or pressure in the ears - cough - swollen lymph nodes? Yes 92.9% and no 7.1%. The sixth question is about the following symptoms of infection in the body (cold): feeling of general fatigue - chills - body pain - low-grade fever less than 38.9 C - feeling after rest in the chest - difficulty breathing in the throat? Yes 95.2% and no 4.8%. The seventh question is about 97.6% or 2.4%. The seventh question is about consulting your physician if you develop the following symptoms: Symptoms that get worse or improve - Fever over 38.5°C lasting more than 3 days - Return of fever after it disappears - Shortness of breath - Whistling sound while breathing or coughing - Severe sore throat or... Persistent headache that doesn't respond to painkillers? Yes 97.6% and no 2.4%. The eighth question: What are the causes of the common cold: rhinovirus - infection by another person - physical contact with a person who has a cold - through contaminated objects? Yes 96.8% and no 3.2%. The ninth question: There is no treatment for colds with antibiotics, but only to relieve symptoms? Yes 88.5% and no 13.5%. The tenth question: What are the following ways to relieve colds: gargling with salt water - drinking plenty of fluids - menthol ointments - inhaling with salt water - taking zinc supplements - afnasia supplements? Yes 93.7% and no 6.3% figure.No.1).

**Figure No.1: Participants' opinions about the effect of medications to alleviate the symptoms of the common cold**



#### 4-CONCLUSION:

Through this current study, From the opinions of the participants, we find that the common cold is a viral disease that cannot be cured. It is possible to use antibiotics and take zinc and vitamins in consultation with the treating physician, which may lead to a significant reduction in the severity of the symptoms of the common cold.

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#### REFERENCES:

- Allan GM, Arroll B (February 2014). "Prevention and treatment of the common cold: making sense of the evidence". *CMAJ*. 186 (3): 190–9. doi:10.1503/cmaj.121442. PMC 3928210. PMID 24468694.
- Arroll B (March 2011). "Common cold". *BMJ Clinical Evidence*. 2011 (3): 1510. PMC 3275147. PMID 21406124. Common colds are defined as upper respiratory tract infections that affect the predominantly nasal part of the respiratory mucosa
- Common Colds: Protect Yourself and Others". CDC. 6 October 2015. Archived from the original on 5 February 2016. Retrieved 4 February 2016.
- Eccles R (November 2005). "Understanding the symptoms of the common cold and influenza". *The Lancet. Infectious Diseases*. 5 (11): 718–25. doi:10.1016/S1473-3099(05)70270-X. PMC 7185637. PMID 16253889
- Heikkinen T, Järvinen A (January 2003). "The common cold". *Lancet*. 361 (9351): 51–9. doi:10.1016/S0140-6736(03)12162-9. PMC 7112468. PMID 12517470.
- Common Cold". Centers for Disease Control and Prevention. Archived from the original on 1 February 2016. Retrieved 27 January 2021.
- Eccles p. 112
- Cold Versus Flu". 11 August 2016. Archived from the original on 6 January 2017. Retrieved 5 January 2017.
- Eccles p. 1
- Simasek M, Blandino DA (February 2007). "Treatment of the common cold". *American Family Physician*. 75 (4): 515–20. PMID 17323712. Archived from the original on 26 September 2007.
- Eccles R, Weber O (2009). *Common cold*. Basel: Birkhäuser. p. 3. ISBN 978-3-7643-9894-1. Archived from the original on 8 May 2016.
- Palmenberg AC, Spiro D, Kuzmickas R, Wang S, Djikeng A, Rathe JA, et al. (April 2009). "Sequencing and analyses of all known human rhinovirus genomes reveal structure and evolution". *Science*. 324 (5923): 55–9. Bibcode:2009Sci...324...55P. doi:10.1126/science.1165557. PMC 3923423. PMID 19213880
- Janicki-Deverts D, Crittenden CN (2020). "Common Cold: Cause". In Gellman MD (ed.). *Encyclopedia of Behavioral Medicine* (2nd ed.). Springer. p. 504. doi:10.1007/978-3-030-39903-0\_795.
- Eccles pp. 51–52

- 15- Eccles p. 209
- 16- CDC (11 February 2019). "Common Colds". *Centers for Disease Control and Prevention*. Archived from the original on 27 September 2020. Retrieved 18 September 2020.
- 17- Montesinos-Guevara, Camila; Buitrago-Garcia, Diana; Felix, Maria L.; Guerra, Claudia V.; Hidalgo, Ricardo; Martinez-Zapata, Maria José; Simancas-Racines, Daniel (14 December 2022). "Vaccines for the common cold". *The Cochrane Database of Systematic Reviews*. **2022** (12): CD002190. doi:10.1002/14651858.CD002190.p ub6. ISSN 1469-493X. PMC 9749450. PMID 36515550.
- 18- Lawrence DM (2009). "Gene studies shed light on rhinovirus diversity". *Lancet Infect Dis*. **9** (5): 278. doi:10.1016/S1473-3099(09)70123-9.
- 19- Jefferson, Tom; Dooley, Liz; Ferroni, Eliana; Al-Ansary, Lubna A.; van Driel, Mieke L.; Bawazeer, Ghada A.; Jones, Mark A.; Hoffmann, Tammy C.; Clark, Justin; Beller, Elaine M.; Glasziou, Paul P.; Conly, John M. (30 January 2023). "Physical interventions to interrupt or reduce the spread of respiratory viruses". *The Cochrane Database of Systematic Reviews*. **1** (1): CD006207. doi:10.1002/14651858.CD006207.p ub6. ISSN 1469-493X. PMC 9885521. PMID 36715243.
- 20- Singh M, Das RR (June 2013). Singh M (ed.). "Zinc for the common cold". *The Cochrane Database of Systematic Reviews* (6): CD001364. doi:10.1002/14651858.CD001364.p ub4. PMID 23775705. **(Retracted)**.
- 21- Hemilä H, Chalker E (January 2013). "Vitamin C for preventing and treating the common cold". *The Cochrane Database of Systematic Reviews*. **1** (1): CD000980. doi:10.1002/14651858.CD000980.p ub4. PMC 1160577. PMID 23440782.
- 22- "Common Cold". National Institute of Allergy and Infectious Diseases. 27 November 2006. Archived from the original on 6 September 2008. Retrieved 11 June 2007.
- 23- Eccles p. 261
- 24- "Common Cold: Treatments and Drugs". Mayo Clinic. Archived from the original on 12 February 2010. Retrieved 9 January 2010.
- 25- Alserahy, Hassan Awad, et al (2008), The thinking and scientific research, Scientific Publishing Center, King Abdul-Aziz University in Jeddah, the first edition
- 26- Al Zoghbi, Muhammad and AlTalvah, Abas (2000), Statistical system understanding and analysis of statistical data, first edition, Jordon-Amman
- 27- Kadasah, N.A.; Chirwa, G.C.; et al. Knowledge, Attitude, and Practice Toward COVID-19 Among the Public in the Kingdom of Saudi Arabia: A Cross-Sectional Study. *Front. Public Health* 2020, 8, 217.