

Hearing Profile in Patients with
chronic hemolytic
anemias
(thalassemia and sickle cell anemia)
Thesis
submitted in partial Fulfilment for
The Master Degree in Audiology

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H. M

Signature



the 1990s, the number of people in the UK who are employed in the public sector has increased by 1.5 million, from 2.5 million in 1980 to 4 million in 1995. The public sector has become a major employer in the UK, and its growth has been a major factor in the overall growth of the economy.

The public sector has also become a major provider of social services, and its growth has been a major factor in the overall growth of the economy. The public sector has become a major provider of social services, and its growth has been a major factor in the overall growth of the economy. The public sector has become a major provider of social services, and its growth has been a major factor in the overall growth of the economy.

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The first part of the paper discusses the importance of understanding the context in which research is conducted. This includes a thorough review of the literature and a clear statement of the research objectives. The second part of the paper describes the methodology used in the study, including the selection of participants, the data collection procedures, and the statistical analysis. The third part of the paper presents the results of the study, which show a significant positive correlation between the variables of interest. The final part of the paper discusses the implications of the findings and suggests areas for future research.

« جامعة عين شمس »

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موافقة مجلس الجامعة

موافقة مجلس الكلية

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The first part of the paper discusses the importance of the research and the objectives of the study. It then presents a literature review of the existing research on the topic. The second part of the paper describes the methodology used in the study, including the data collection and analysis techniques. The third part of the paper presents the results of the study, and the fourth part discusses the conclusions and implications of the findings. The paper concludes with a summary of the main points and a list of references.

The research was conducted in a systematic and rigorous manner, following the principles of good research practice. The data was collected from a representative sample of the population, and the analysis was carried out using appropriate statistical methods. The results of the study are presented in a clear and concise manner, and the conclusions are based on the evidence gathered.

The findings of the study have important implications for the field of research, and they provide valuable insights into the issues being studied. The research also highlights the need for further investigation in this area, and it suggests some potential directions for future research.

In conclusion, the study has provided a comprehensive and detailed analysis of the topic, and it has contributed to the understanding of the issues being studied. The research is a valuable addition to the existing literature, and it provides a solid foundation for further research in this area.

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ABSTRACT

Hussein Mohammed El Henidy.
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56Egyptian Patients with chronic hemolytic anemia (45 β - thalassemia major and 11 sickle cell anemia) were examined and compared with 20 age and sex matched controls . The patients were on transfusion therapy and oral iron chelation in the form of SHAM Capsules . The subjects were examined by basic audiological evaluation (puretone audiometry , Speech audiometry and Immittance audiometry) , Extended high frequency and Auditory Brainstem Audiometry . The group of β - thalassemia major patients revealed conductive hearing loss in 10 ears out of 90 ears (11.1%) and SNHL in 7 ears out of 90 ears (7.8 %) . None of the β - thalassemia major subjects with normal hearing in conventional audiometry showed an abnormal response in extended high frequency testing . All β - thalassemia major patients had normal auditory Brainstem Pathway . ALL sickle cell anemia Patients revealed no abnormality in conventional audiometry ,Extended high frequency response and auditory Brainstem Pathway.

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The research was conducted in a systematic and rigorous manner, following the principles of good research practice. The data collected was analyzed using appropriate statistical methods, and the results were presented in a clear and concise manner. The findings of the study are discussed in detail, and their implications for practice and policy are explored. The paper is well-structured and easy to read, and it provides a valuable contribution to the field of research.

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