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The aetiology and nature of paediatric dysphagia (0-18 months) in state hospitals Johannesburg, Gauteng.

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PLAGIARISM DECLARATION TO BE SIGNED BY ALL HIGHER DEGREE STUDENTS

SENATE PLAGIARISM POLICY: APPENDIX ONE

I Andrea Fourie (Student number: 430699) am a student registered for the degree of MA Speech Pathology in the academic year 2011.

I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
- I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this in not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.

Signature: _____ Date: 10/04/2011

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ABSTRACT

Background: Many infants in developing countries are faced with poverty, poor nutrition, limited access to healthcare, and exposure to communicable diseases that place them at risk for negative developmental consequences. Dysphagia is estimated to occur in 25-40% of normally developing, and 80-90% of infants with disabilities. International studies report the common causes of dysphagia to be of gastro-intestinal and neurological origin, yet limited research exists into the profile of paediatric dysphagia within developing contexts.
Objective: To describe the profile of paediatric dysphagia in state hospitals, Gauteng.
Methods: By means of a retrospective record review, this study investigated paediatric dysphagia (0-18 months) in state hospitals, Johannesburg. Hospital records of 263 infants with feeding impairments were analysed using descriptive statistics, phi correlations and logistical regression.
Results: Findings revealed 214 underlying aetiological combinations whereby 65% (n=171) of infants experienced dysphagia secondary to a systemic illness, predominantly communicable diseases. The health professionals, management strategies and procedures employed in the assessment and intervention of paediatric dysphagia were context specific and related to the aetiological and social factors influencing the infants.
Conclusion: Results differ significantly to those reflected in studies from developed countries. Of concern is the fact that 65% of infants experienced dysphagia secondary to a systemic illness, since with adequate nutrition, sanitation and health care, these conditions are potentially preventable. By improving social circumstances, the effects of systemic illnesses may be minimised, and may consequently decrease the number of infants affected by dysphagia. This implies that paediatric dysphagia in South Africa is no longer merely a health dilemma, but one which involves basic human rights.

Key words: developing countries-South Africa; paediatric dysphagia; retrospective review; systemic illness

GLOSSARY OF TERMS

Anatomical/structural disorder: Anatomical/structural conditions are abnormalities of the soft tissue and skeleton of the face, oropharynx, larynx, pharyx, oesophagus or stomach. These conditions may be congenital or acquired (Arvedson & Brodsky, 2002, p. 37-38, 528)

Aspiration: "secretions, food or any foreign material in the airway below the level of the true vocal folds" (Arvedson & Brodsky, 2002, p. 608)

Dysphagia: "impaired swallowing, secondary to dysfunction in the oral, pharyngeal, and/or oesophageal phase" (Arvedson & Brodsky, 2002)

Feeding: complete eating experience including the environment, persons involved, foods eaten as well as the overall experience of eating (Delaney & Arvedson, 2008)

Feeding disorder: "problems in a broad range of eating activities that may or may not be accompanied by a difficulty with swallowing food and liquid" (Arvedson, 2008, p. 118-119)

Gastro-oesophageal reflux: "retrograde flow of gastric or biliary secretions from the stomach into the oesophagus" (Arvedson & Brodsky, 2002, p. 614)

Genetic disorder: conditions related to chromosomal abnormalities including Down Syndrome, Pierre Robin Sequence, etc. (Arvedson & Brodsky, 2002, p. 5, 34)

Nasogastric tube: "a small, flexible tube inserted through the nose into the stomach; used to gavage-feed an infant" (Arvedson & Brodsky, 2002, p. 619)

Neurological: Conditions as a result of damage to the central nervous or neuromuscular systems including cerebral palsy, delayed development, muscular dystrophies, or any other disease or disorders that affects the integrity of the nervous system (Arvedson, 2008; Berlin, Lobato, Pinkos, Cerezo & LeLeiko, 2011)

Oesophageal phase of swallowing: The oesophageal stage of the swallow ensures that the food enters the stomach in order for the digestion process to begin (Arvedson & Brodsky, 2002, p. 46)

Oral phase of swallowing: The oral phase occurs in the oral cavity and is concerned with preparing the food to be swallowed (Arvedson & Brodsky, 2002, p. 41; Ertekin & Aydogdu, 2003; Winstock, 2005, p. 17)

Penetration: "when material enters the laryngeal area to the level of the true vocal folds" (Smith Hammond & Goldstein, 2006, p. 156S)

Percutaneous Endoscopic Gastrostomy: "Feeding tube placed directly into the stomach from the skin, utilising an endoscope for guidance" (Arvedson & Brodsky, 2002, p. 620)

Pharyngeal phase of swallowing: The pharyngeal phase of the swallow ensures that the airway is protected from food entering the lungs and directs the bolus from the oral cavity

toward the stomach (Arvedson & Brodsky, 2002, p. 41; Ertekin & Aydogdu, 2003; Winstock, 2005, p. 18)

Psychological/behavioural feeding disorders: conditions related to psychosocial aspects including poor environmental conditions; food aversion or selectivity and emotionally based conditions such as depression, anxiety and food phobias (Berlin et al., 2011)

Systemic illness: condition affecting one of the biological systems including the respiratory, gastrointestinal, immunological, metabolic and cardiological systems (Arvedson & Brodsky, 2002, p. 5)

Swallowing: physiological aspect of transporting food from the mouth to the stomach (Delaney & Arvedson, 2008)

Videofluoroscopic swallow study (VFSS): "this is a barium contrast study that evaluates the oral and pharyngeal phase of swallowing physiology" (Arvedson & Brodsky, 2002, p. 628)

ABBREVIATIONS

CHBH	Chris Hani Baragwanath Hospital
CMJAH	Charlotte Maxeke Johannesburg Academic Hospital
FEES	Fibre-optic endoscopic evaluation of swallowing
FTT	Failure to thrive
GOR	Gastro-oesophageal reflux
GORD	Gastro-oesophageal reflux disease
NG	Naso-gastric
OT	Occupational Therapy
PEG	Percutaneous Endoscopic Gastrostomy
PHC	Primary Health Care
RMMCH	Rahima Moosa Mother and Child Hospital
SIDS	Sudden infant death syndrome
TPN	Total parental nutrition

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