

KNOWLEDGE AND PRACTISE OF DOCTORS AND NURSES ABOUT CHILDHOOD PNEUMOCOCCAL AND INFLUENZA VACCINES IN JORDAN

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The WHO has issued recommendations for use of the conjugate pneumococcal vaccine and yearly influenza in children considered to be at high risk for both infections.

A survey of General Paediatricians and nurses in Jordan was undertaken in the winter of 2010, to assess their familiarity with the **recommendations** on pneumococcal and influenza immunisation of high-risk children.

Method: Self-administered Questionnaires were sent to Paediatricians and nurses in 5 Community Child Health Centres (CCHC) and 10 District General hospitals (DGH).

Results: A total of 131 questionnaires (80% of total) were returned from doctors (60%) and nurses (40%). One third of the respondents worked in DGH and the remaining in tertiary centres. 81% of the respondents were aware of the indications for the vaccines.

The most correctly identified high-risk children for both vaccines were cystic fibrosis (74%), chronic lung disease (71%) and HIV/AIDS (66%) (Table 1). The least correctly identified conditions were Diabetes mellitus (34%), Biliary atresia or chronic hepatitis (37%) and chronic heart failure (48%).

The preferred methods of advising patients included verbal information (53.4%), the GP (44.2%), and letters (20.5%). 71.7% of respondents wanted the vaccines given in primary care, others preferred the tertiary centre (31.3%) or the DGH (22.9%). Monitoring adherence to vaccination was recommended by 84% through GP letters (41.2%) or verbal information from carers (54.2%).

Table 1 showing the distribution of correctly identified indication for the pneumococcal and influenza vaccines.

VACCINES		PNEUMO	FLU	AVERAGE
Children having a chronic (ongoing) lung disease.	Cystic fibrosis	74.8	73.3	74.05
	Chronic lung disease (CLD)	74.8	67.9	71.35
	Children previously admitted with a lower respiratory tract disease	NO (43.5)	53.4	48.45
	Asthmatics requiring regular use of inhaled or systemic steroids	59.5	67.9	63.7
	Children previously admitted because of asthma	NO (39.7)	67.9	53.8
Children with respiratory conditions caused by or predisposing to aspiration.	Neuromuscular disease (eg cerebral palsy)	51.9	64.9	58.4
Chronic heart disease e.g. requiring regular medication or follow-up	Congenital heart disease	56.5	59.5	58
	Chronic heart failure.	45	51.1	48.05
Chronic kidney disease.	Nephrotic syndrome	69.5	58.8	64.15
	Chronic renal failure	55	57.3	56.15
	Post renal transplant.	64.9	54.2	59.55
Chronic liver disease such as:	Biliary atresia, chronic hepatitis	35.9	38.2	37.05
	Cirrhosis.	52.7	47.3	50
Immunocompromised patients	Asplenia or severe splenic dysfunction (eg homozygous Sickle Cell or Coeliac disease).	80.9	67.9	74.4
	HIV/AIDS	71.8	61.1	66.45
	On chemotherapy or steroid treatment	61.8	56.5	59.15
Diabetes mellitus	38.2	NO (30.5)	34.35	
Children with cochlear implants	56.5	NO (38.2)	47.35	
Patients with CSF shunts	63.4	NO (27.5)	45.45	
Children under the age of 5 who have previously had invasive pneumococcal disease	72.5	NO (29.8)	51.15	
Average		58.44	53.66	56.05

Conclusion: The low rate of correct identification of patients requiring pneumococcal and influenza vaccines among healthcare professionals in Jordan suggests a nation-wide programme of educational and increased awareness is urgently needed.