PAEDIATRICS

Elective Report

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Describe the Canadian healthcare system and how it differs from that in the UK? Does this impact on quality of care and are there significant differences in morbidity and mortality.

The Canadian Healthcare system is similar to the NHS, in that it is free at the point of delivery. Like the NHS it is publicly funded through income taxation (except for British Columbia which is based on a fixed premium), however, in contrast to the NHS, most services are provided by private institutions. The system, known informally as medicare, is thought to be relatively efficient due to a reduction in administrative costs as compared to the NHS which follows a nationalized model.

The term Canadian healthcare system is something of a misnomer as healthcare is under provincial, rather than national, jurisdiction. In Quebec this is known as the Regie de l'Assurance Maladie du Quebec (RAMQ), which is funded nationally but operates provincially, managing its spending and coverage independently (outside of requirements by the Canada Health Act). A notable result of this is that the Quebec health plan provides universal coverage for prescription medication, unlike any other province in Canada. This is comparable to the Welsh, Scottish and English divisions of the NHS, with England currently paying £7.40 per prescription, and Wales receiving free prescription medication.

The Canadian Medicare system and the NHS are both developed health services, and as such, unsurprisingly, there is no significant differences in the morbidity or mortality between the nations. The average life expectancy in Canada is 80.7 compared with 79.4 in the UK, and the infant mortality rate of both is 4.8 (UN populations division 2009). A more appropriate measure to compare these well developed countries would be health expenditure as a percentage of GDP, which is 10% in Canada compared with 8.2% in the UK (WHO 2006).

Many of the patients seen in Behavioural And Developmental Paediatrics will present with Autistic Spectrum Disorders. What is the prevalence of these disorders and are there significant epidemiological differences in the UK?

Reliable and consistent statistics for the prevalence of autistic spectrum disorders in Canada are currently unavailable. However, the ASC (Autism Society Canada) estimates a prevalence of approximately 60 per 10000 of the child population. The epidemiology of ASD shows little significant geographical variation, however the National Autistic Society UK cites a figure of 20 per 10000 (Wing and Gould 1979). This discrepancy is likely due to outdated information, and as stated by Wing and Potter (2002), differences in definitions and case finding methods can cause statistical variation.

While these figures are variable, there has been a noticeable trend of increasing prevalence in ASD. This increase is recognised globally and it is this that infamously led to the Wakefield et al (1998) paper which falsely postulated a link between the MMR vaccine and autism.

Quebec, together with Saskatchewan and British Columbia, have all provided reliable data suggesting an increase in the number of diagnoses of ASD over the past 10 years. Fombonne et al (2003) showed that the prevalence of ASD in Montreal had increased from 40 to 60 per 10000 in that time frame, and concluded that the increase was not related to MMR vaccination or ethyl mercury exposure. Instead, the likely causes are broadening diagnostic criteria, increased awareness of the disease prompting referral, and increased access to services.

How are communication skills adapted when dealing with patients with language disorders. How have I adapted to this challenging situation?

Communicating with patients who have developmental disorders presents it's own unique challenges. A large proportion of patients present with language disorders, and so the linguistic capabilities of the patient need to be considered when taking a history and discussing management. The nature of paediatrics means that this challenge is somewhat circumvented by discussing directly with the parents, however it is important not to neglect the child, and include them in the decision making.

Communication is a two way process, both receiving and giving information. In developmental disorders the receptive arm tends to follow an opportunistic course, with the physician picking up on non-verbal cues such as smiling, eye contact, and attentiveness, during the course of the interview. If the patient is able to verbalise, it is

important to appreciate the character of the language as this can often be as informative as the content of what is said.

The expressive arm is perhaps more of an acquired skill. It is important that the child is involved in their healthcare, and as such any treatment or management should be explained to them. A simplistic and structured approach should be followed, giving broad principles in a memorable fashion. The role of the parents, however, should not be underestimated, as they are often able to better communicate with the child than the physician.

I am finding that highlighting the core principles in simplistic language is the most important difference in communication within this speciality. As such, the patient will not be overloaded with information and will leave the consultation better educated about their condition.

Many patients seen in Behavioural and Developmental Paediatrics will present with language disorders. How is this changed in the context of a bilingual society, and is this a risk factor?

Many of the patients seen in clinic present with language delay. Most of the patients seen are raised in bilingual homes (French and English), and there are sometimes concerns that this may cause or exacerbate a language delay. King and Fogle (2006) found that many parents believe that bilingualism will result in language delay due to a 'confusion' or interference between the two languages. This idea has been propagated through popular parenting literature, however, the medical literature on this topic is clear in stating that there is no proven causal link between bilingualism and language delay. De Houwer (1999) states that "there is no scientific evidence … that hearing two or more languages leads to delays or disorders in language acquisition. Many, many children throughout the world grow up with two or more languages from infancy without showing any signs of language delays or disorder".

This finding is supported by Petitto and Holowka (2002) who showed that simultaneous exposure to two languages at an early age does not compromise the child's acquisition of the semantic and conceptual underpinnings of either language. In this way, the bilingual child should hit the same linguistic milestones as their monolingual counterparts.

This being said, it is important to recognise differences that can be expected of bilingual children. Whilst there is no evidence for interference between the two languages in terms of neurocognitive pathways, the child may engage in a phenomenon known as code switching, whereby they mix the two languages within conversation or within a single sentence. This is not a sign of language disorder, rather, it is indicative of code switching

practice of the parents or wider community. Parents should be encouraged to maintain one language for one semantic phrase (Lanza 1992).