**English for Medical Students: Writing research articles in English**

***This week (before 19th August) you should complete TWO sections of activities on moodle: 02 Introductions and 03 Methods)***

**02 Developing academic literacies: Research article introductions**

These activities focus on the Introduction section of a typical research article. Research suggests that typically the Introduction section falls into 3 main moves with possible steps, such as the following:

1. *Establishing your research territory*
   1. Indicating that your topic is important in some way
   2. Making a generalisation about the topic
   3. Reporting relevant research
2. *Identifying a research niche*
   1. Challenging or questioning previous research
   2. Finding a gap in previous research
3. *Occupying the research niche*
   1. Summarising the aims of your research
   2. Previewing your research findings
   3. Summarising the structure of your article.

Not all of these moves and steps will be present in any given article, but they very often are. Can you recognize them in the following article?

Rasella, D., Harhay, M. O., Pamponet, M. L., Aquino, R., & Barreto, M. L. (2014). Impact of primary health care on mortality from heart and cerebrovascular diseases in Brazil: a nationwide analysis of longitudinal data. *BMJ,* 349, g4014*.*

1. Read the Introduction section of the article from the *British Medical Journal*,and answer the following questions.
2. Identify the topic generalisation that begins the Introduction. What kind of language is used to indicate the importance of the topic? Notice the tense used.
3. Identify the beginning and end of the section that summarises relevant previous research. Notice the use of tenses: (1) simple present to indicate current facts; (2) present perfect to indicate actions in the past, without indicating a specific time reference, or to indicate past actions with present relevance; (3) simple past tense to ‘anchor’ actions with reference to particular points of time in the past.
4. Identify the second move. How is the beginning of this move signalled? Is the previous research challenged, or extended in some way?
5. How do the researchers occupy their research niche? Again, pay attention to the language they use to do this.

**Introduction**

Cardiovascular disease is the leading cause of mortality among non-communicable chronic diseases and is responsible for 30% of all global deaths, constituting a large and growing burden in middle and low income countries.1 2 3 Ischaemic heart disease and cerebrovascular disease are responsible for the majority of cardiovascular disease mortality, accounting for 7.6 million and 5.7 million of deaths annually, respectively,4 and are leading causes of disease burden as measured in disability adjusted life years lost.5 6

The control, management, and prevention of cardiovascular disease and other non-communicable diseases is fundamentally different from acute care, relying on several features for success typically found within a strong primary health care system, and an approach centred primary health care could represent a cost effective strategy to reduce the cardiovascular disease burden in low and middle income countries.7 8

In Brazil, the Ministry of Health has designated the Family Health Program (FHP), the main primary health care programme of the country, as the leading initiative in the national strategy for reduction of cardiovascular disease and other diseases.9 10 The FHP was launched in 1994 and has experienced a dramatic expansion within and across Brazil’s 5564 municipalities. Presently, FHP, has become the world’s largest community based primary health care programme, present in 95% of municipalities and covering 53% of the Brazilian population in 2011.11

The major expansion of primary health care in Brazil through the FHP has translated into improved population health outcomes,12 13 and FHP activities include health promotion, primary prevention and management of cardiovascular disease risk factors, as well as secondary prevention for high risk individuals (monitoring of hypertension and diabetes) and rehabilitation of patients with cardiovascular disease, orchestrated primarily through domiciliary visits and community interventions operated by community health workers.10 14 In 2009, a list of ambulatory care-sensitive conditions was created to monitor primary health care performance and evaluate its cost effectiveness.15 In the past decade in the country a decline of about 20% in the age standardised mortality rates for ischaemic heart and cerebrovascular diseases has been documented—reaching 69.2 and 70.7 deaths per 100 000 inhabitants respectively in 2009.16 17 However, the mechanisms causing this decline have not been examined or identified, and it is speculated to be consequence (among others) of successful implementation of health policies that led to the expansion of access to primary health care.18 Ambulatory care-sensitive conditions represented 40% of the mortality from cerebrovascular and ischaemic and other forms of heart disease, accounting for more than half a million deaths in the past decade.11

The aim of the present study is to evaluate the impact of the FHP on age standardised mortality rates from heart and cerebrovascular diseases included in the ambulatory care-sensitive conditions, as well as the impact on some potential intermediate mechanisms, such as health promotion activities and hospitalisations for cardiovascular disease, in the period 2000 to 2009 in Brazilian municipalities.

1. Now return to the article that you chose on a topic that interests you.
   1. Read the Introduction section and ask the same questions that you asked about the article above.
   2. Note down any useful language. Add any particularly useful vocabulary to **Your Vocabulary List** on moodle.
2. Think of a piece of research that you have been involved with.
   1. Write a suitable 3-move Introduction for an article about it.
   2. Upload the **Introduction** of your article to the moodle site by **19th August**.
3. **By 19th August**, in the learning blog on moodle, write around 150-200 words in your learning blog, e.g. on the following topics:

* Useful language to indicate the importance of research topics
* Questions/comments about how you summarise previous research
* The pros and cons of challenging previous research (ie suggesting it is wrong), versus finding a gap in previous research
* Useful language for occupying the niche in your own research area

***Now complete Section 03 Methods***