

### QGWS Episode 3: Writing a methods section

N: Hello and welcome back! In the last episode we learned how to write an introduction to an IMRD text. This time we'll help you with the next section, the methods. Many of the examples come from this article. Let's remind ourselves what it's about.

V: "Epidemiology of race-day distal limb fracture in flat racing Thoroughbreds in Great Britain"

N: To recap up, the topic is a kind of injury which can occur in racehorses: fractures in the distal limb. The purpose of this study is to find out whether injuries like this happen more often under certain circumstances. The heading can be worded in different ways. For example, this is called "methods and materials" and this one says "procedures". The purpose of the methods section is to describe how the research was carried out. This helps readers judge how convincing they find the results. It also helps researchers who want to reproduce the study. The contents vary, depending on the sort of research which was carried out, but it's common to address three questions: what kind of data were used?; how were they collected?; and how were they analyzed? This article has three subsections, each one answering one of the questions above. The first one is:

V: "Study design and case definition"

N: Next we have:

V: "Data collection and processing"

N: And finally:

V: "Data analysis".

N: These are common objectives in a methods section, and there are some common patterns of language which support them. First, the descriptions of what the researchers did are in the past tense.

V: "For each start, horse demographics, race, course, trainer and jockey variables were collated from the Weatherbys' racing database."

N: They're also in the passive voice. That is, they don't mention the people who did these things. For example, it doesn't say this.

V: "For each start, our research assistant collated horse demographics, race, course, trainer and jockey variables."

N: Phrases like "using" or "based on" or are used to say how things were done. You often need to explain why the procedures you used were appropriate. In the following example, the reason is that earlier researchers had done it the same way.

V: “The number of days since last start was modelled as a categorical variable with four levels based on previous research.”

N: Being precise is important, so definitions or clarifications of terminology, like these, are common:

V: “A start was defined as having occurred when a horse that was declared to race had entered the starting stalls prior to racing.”

“Distal limb fracture was defined as an event that resulted in the veterinary diagnosis of a fracture to the distal limb.”

N: And because the methods section describes a process, phrases which put the steps in order are used. For example:

V: “Prior to the commencement of the study. . .”

N: So your methods section tells a story about research that you’ve carried out in the past, with emphasis on the procedures rather than the people doing them, and on making the description precise. You can find more examples of language used to do these things in the Academic Phrasebank. Hope to see you in the next episode.