Risk Factor vs. Cause

Can the terms *risk factor* and *cause* be used interchangeably? Well, sometimes.

As defined in *Dorland’s Illustrated Medical Dictionary*, a cause is anything that “brings about any condition or produces any effect.”

**Examples:**
- Viruses, bacteria, and fungi are all known to cause diseases.
- Cancer can be caused by genetic, environmental, and/or immunological factors.
- Her slip on the icy surface caused her to fall and break her hip.

In contrast with the definition of cause, *Dorland’s* says that a risk factor is “a clearly defined occurrence or characteristic that has been associated with the increased rate of a subsequently occurring disease.” This shows that a risk factor’s relationship to a disease is less direct than that of a cause.

**Examples:**
- Obesity is a risk factor for gynecological cancers.
- Atherosclerosis is a risk factor for primary hypertension.
- Exposure to secondhand smoke is a risk factor for chronic obstructive pulmonary disease.

However, *Dorland’s* also adds this qualifying statement in the definition of risk factor: “causality may or may not be implied.” Because a risk factor may both cause a disease and be associated with an increased incidence of it, the term risk factor is more widely applicable than cause.

**Reference**

--Don Norwood