



Synthesizing qualitative research evidence from complex interventions by inductive thematic content analysis using modified in-vivo coding



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Introduction

The achievement of the Sustainable Development Goals (SGDs) involves the execution of complex interventions characterized by multiple overarching themes. Synthesis of qualitative evidence from these interventions require innovative and efficient systems that can seamlessly segment, organize and aggregate qualitative data logically. This paper describes the modified in-vivo coding system (MICS) for inductive thematic content analysis that is based on abstraction of meaning in a logical hierarchy.

Abstracting meaning

Coding using a qualitative data analysis software (QDAS) allows for making meaning from qualitative materials through tagging of qualitative data segments with representative names. MICS is premised on the idea that coding should be systematic and codes names should be brief but meaningful. In MICS, three levels abstraction of meaning of data segments are identified. Primary is a tag whose name is the modified content of the data segment, secondary represents the emerging theme under which the primary is thought to belong and tertiary represents the over-arching theme or distinct module.

Synthesizing evidence

The critical aspects of the MICS are two: firstly, the name of each code consists of two consecutive levels of abstraction separated by a colon; and secondly, each data segment is double-coded at a minimum so that in every instance of tagging, the three levels of abstractions are captured using the pattern 'Tertiary: Secondary' and 'Secondary: Primary'. For instance, in the process evaluation of a complex diarrhea prevention program which had multiple approaches including a school-based intervention, a data segment indicating activities in the school intervention was coded as: School health club: Activities; Activities: Regular meetings. In this case, the overarching theme or module was School Health Club approach, an emerging theme was type of activities carried out while the content of the data segment being coded was that the school health clubs held regular meetings. The Query analytical tool in QDAS is then used to extract data segments organized by code hierarchical relationships.

Conclusion

The naming convention and the double coding in MICS blends with the analytic capabilities of QDAS to meaningfully aggregate and systematically extract data segments allowing for logical synthesis of qualitative evidence in research into complex interventions.

References

Rapley, T. (2011). Some pragmatics of data analysis. *Qualitative research*, 3, 273-290.