

## Increasing nursing capacity in genomics: Overview of existing global genomics resources

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### Abstract

#### Background

Global genomic literacy of all health professions, including nurses, remains low despite an inundation of genomic information with established clinical and analytic validity and clinical utility. Genomic literacy and competency deficits contribute to lost opportunities to take advantage of the benefits that genomic information provides to improve health outcomes, reduce healthcare costs, and increase patient quality and safety. Nurses are essential to the integration of genomics into healthcare. The greatest challenges to realizing their potential in successful integration include education and awareness. Identification of resources, their focus, whether they targeted at nursing, and how to access them, form the foundation for a global genomic resource initiative led by the Global Genomics Nursing Alliance.

#### Keywords

NursingGenetics, GenomicsCompetency, EducationGenomic resources

#### Objectives

The aim was to identify existing global genomic resources and competencies, identifying the source, type and accessibility.

#### Design

Cross sectional online descriptive survey to ascertain existing genomic resources.

#### Settings

Limited to eighteen countries and seven organizations represented by delegates attending the inaugu-

ral meeting in 2017 of the Global Genomics Nursing Alliance.

#### Participants

A purposive sample of global nursing leaders and representatives of national and international nursing organizations.

#### Methods

The primary method was by online survey administered following an orientation webinar. Given the small numbers of nurse leaders in genomics within our sample (and indeed within the world), results were analyzed and presented descriptively. Those identifying resources provided further detailed resource information. Additional data were collected during a face-to-face meeting using an electronic audience-response system.

#### Results

Of the twenty-three global delegates responding, 9 identified existing genomic resources that could be used for academic or continuing genomics education. Three countries have competence frameworks to guide learning and 5 countries have national organizations for genetics nurses.

#### Conclusions

The genomic resources that already exist are not readily accessible or discoverable to the international nursing community and as such are underutilized.