# Systematic Review of Health and Disability

Tara Lutz and Nick Gelbar University of Connecticut Health Center-University Center for Excellence in Developmental Disability

## Background

Goals set forth by Healthy People 2020 include increasing the health and well-being of people with disabilities. Compared to individuals without disability, those with disability are less likely to be involved in various programs and activities in different areas of health promotion (insert citations). Excluding individuals with disabilities from programs that are designed to prevent primary and secondary conditions may drastically impact their health.

In order to work toward this Healthy People 2020 goal, it is imperative to understand the current research base for health promotion and disability. In order to increase access, encourage participation, and promote healthy behaviors for individuals with disabilities in the community we must recognize areas where health promotion efforts have worked and where future research is required.

#### Methods

Towards this goal, a systematic literature review of health promotion and disability according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) was conducted. The following Boolean search terms were searched in the PubMed, CINAHL, and PsycINFO databases:

"health promotion" OR "health education" OR "wellness program" OR "health program" OR "health curriculum")

AND

(disabl\* OR disabilit\* OR "handicap" OR " mental retardation" or autis\* OR "down syndrome"

Articles were included if they met the following inclusion criteria: were published in English, were published in a peer reviewed journal, were about persons with disability and about health promotion. Articles that did not meet one or more criterion were coded to reflect the reason(s) for exclusion and not considered for further analysis. The titles and abstracts were screened by the authors and if at least one coder indicated the article met the criteria, it was included in the full-text review. Each article in the full-text review was given a unique code. A coding sheet was created in Qualtrics, an online survey program, to collect the data on each article. Data was collected on the topic of the article, the target disability population, and the methodology employed. If the article presented original data for an intervention or a quantitative/qualitative survey (a descriptive study), then information on the sample's demographics were coded.

#### Results

All information was independent coded by each author. The authors then met to discuss disagreement in the coding, which led to 100% agreement on the coding of the articles.

The initial search terms were entered into RefWorks, a citation management program, which yielded 7269 articles. As depicted in the following flow chart, 4456 articles remained after duplicates were removed. After a manual removal of 323 entries, 4133 titles and abstracts were screened with the

inclusion criteria yielding 1690 articles whose full-text was reviewed. Of these, 469 met the inclusion criteria.

#### Text from Flow Chart:

Articles were identified through a database search which yielded 7,269 results. Of these, 4,456 records were removed as duplicates by RefWorks. Following this, duplicate records were removed manually resulting in 4,133 records remaining. The titles and abstracts of these remaining records were then screened. Through the screening process another 2,433 records were excluded. Records were excluded for several reasons. 328 records were excluded because the full text could not be located. 2,058 were excluded because the article was not about persons with disabilities. 36 records were excluded because the article was not about health promotion and another 21 were excluded because the article was not about disability or health promotion. After removing these records, 1,690 full text articles remained which were then reviewed. Of these remaining records, it was determined that 1,221 did not meet criteria for inclusion for several reasons, and thus were excluded. 75 of these articles were excluded because the article was not published in English. 172 articles were not about persons with disabilities. 600 articles were excluded because they were not about health promotion. Another 89 were excluded because they were not about disability or health promotion. Lastly, 285 articles were excluded because they were not published in a peer-reviewed journal. After removing these records, 469 full-text articles met criteria for inclusion in this review. Of these 469 articles, the content can be categorized as follows: 32 surveys of carers, 10 meta-analyses or secondary analyses, 213 review articles, 125 intervention studies, and 89 descriptive studies.

## Text from Graph 1:

The number of descriptive and intervention studies that focused on populations within different disability categories was then calculated. The number of studies in each disability category is as follows. 29 descriptive and 42 intervention studies focused on intellectual disabilities. 21 descriptive and 18 intervention studies focused on disabilities in general. Six descriptive and eight intervention studies focused on orthopedic impairments. Five descriptive and 11 intervention studies focused on hearing impairments. Two descriptive and four intervention studies focused on visual impairments. Five descriptive and six intervention studies focused on Down syndrome. Five intervention studies focused on psychiatric disorders. Six descriptive and five intervention studies focused on Multiple Sclerosis (MS). Three descriptive and three intervention studies focused on Acquired Brain Injuries (ABI). One descriptive and one intervention study focused on Autism/Autism Spectrum Disorders (ASD). One descriptive and one intervention study focused on Cerebral Palsy (CP). One descriptive study was focused on neurological impairments. Lastly, three descriptive and four intervention studies were focused on the disability category of "other".

# Text from Graph 2:

The number of descriptive and intervention articles in different topic areas was also calculated. 16 descriptive and 28 intervention studies were categorized as "general". 15 descriptive and 27 intervention studies focused on the topic of oral health. 14 descriptive and 26 intervention studies focused on the topic of physical activity. 15 descriptive and seven intervention studies were categorized as "other". 13 descriptive and four intervention studies were focused on the topic of sexuality. Seven descriptive and 15 intervention studies focused on cancer. One descriptive and 10 intervention studies

focused on nutrition and physical activity. Two descriptive and two intervention studies focused on reproductive health. One descriptive and three intervention studies focused on the topic of nutrition. Three descriptive and two intervention studies focused on quality of life. Lastly, two descriptive and one intervention study focused on the topic of smoking.