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# Health information programming in public libraries: a content analysis

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# **Health Information Programming in Public Libraries: A Content Analysis**

## **Abstract**

Health information programs, defined as library programs focusing on health related topics, are an essential way for public libraries to reach out to their user communities, raising awareness of and interest in healthy lifestyle, promoting access to quality health information, and ultimately enhancing health literacy of the citizenry. This study presents a content analysis of the health information programs provided by a large urban public library system in the past year, seeking to strengthen the professional understanding of how public libraries can contribute to health literacy improvement through effective programming, and help other libraries gain insights on health information program planning and implementation.

## **Introduction**

Health literacy is defined as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services need to make appropriate health decisions” (IOM 2004). US Department of Health and Human Services considers increasing the nation’s health literacy skills as a public health priority. However, only 12% of the adult population has proficient health literacy. In other words, nearly nine out of ten adults may lack the skills needed to manage their health and prevent disease. Furthermore, 14% of adults have “below basic” health literacy and these adults are more likely to report their health as poor and to lack health insurance (ODPHP 2016).

To help the public enhance health literacy, it is important for them to have efficient and effective access to high-quality and comprehensible health information. Public libraries are uniquely positioned to play a supporting role in this regard. They provide a no-cost, convenient way to assist the public in navigating health information resources, fulfilling their health information needs, and ultimately improving their health literacy. The public library is often the first place many people consult when seeking information on important health topics, such as health care coverage eligibility, disease prevention and treatment (Zionts et al. 2010).

The Public Library Association (PLA)’s Deputy Director Scott G. Allen acknowledged that health literacy is a key topic for public libraries, as the majority of consumers struggle to make sense of the health information they encounter each day. He emphasized public libraries’ role in promoting health literacy, explaining that “consumers need help understanding what’s relevant to their health,

what's legitimate, and how marketing and sensational headlines might be drawing attention away from valid research findings" (Dixon 2017).

Health information is generally considered one of the top-five or top-ten topics of interest to public library users, and health-related questions account for as many as 60% of the total library reference questions (Flaherty and Grier 2014; Luo and Park, 2013). The number of health-related questions received by public libraries has steadily increased in the past three decades and escalated exponentially since the late 1990s (Luo and Park, 2013). Thus, it is important for public libraries to actively engage in community health information outreach to help the public better fulfill their health information needs.

Health information programs, defined as library programs focusing on health related topics, are an essential way for public libraries to reach out to their user communities, raising awareness of and interest in healthy lifestyle, promoting access to quality health information, and ultimately enhancing health literacy of the citizenry. This study offers an in-depth examination of the health information programs provided by a large urban public library system in the past year, seeking to strengthen the professional understanding of how public libraries can contribute to health literacy improvement through effective programming, and help other libraries gain insights on planning and implementing health information programs.

## **Literature Review**

Research has shown that low health literacy leads to poor health status and outcomes, when education and other well-established predictors of health status are controlled (RTI International 2011). Notably, the average health literacy scores for Black, Hispanic, American Indian/Alaska Native, and multicultural adults were lower than those of White and Asian/Pacific Islander adults. For instance, 58% of Black and 66% of Hispanic adults exhibited "basic" or "below basic" health literacy compared to only 28% of white adults. Bilingual adults, especially those with limited English proficiency, had lower average health literacy scores than native English speakers (Singleton and Krause 2009).

It has been recognized that health literacy disparities contribute to racial and ethnic health disparities. To reduce health disparities, improved health information access is critical as it enables individuals to make better health-related decisions and stay healthier. Health information outreach/programming plays a vital role in public libraries' mission to enhancing the public's access to quality, reliable health information. This enhanced access is achieved via improving individuals

and communities' awareness of quality resources and providing information and training in their use. The focus is on equipping individuals with flexible knowledge and skills, thus enabling them to locate quality health information when they need it (Whitney, Dutcher and Keselman 2013).

Parker and Kreps (2005) examined health providers/organizations' outreach efforts and grouped them into three categories: health literacy educational programs, message design programs, and strategic communication training and intervention programs. Drawing upon these findings, they proposed ideas for public libraries to devise health information programs and conduct health information outreach to their communities. Their suggestions included 1) libraries work to identify their patrons' particular health information needs and the barriers that are preventing them from meeting those needs, and then develop approaches that are responsive to the identified cultural and content needs; 2) libraries collaborate with practicing physicians or other members of the health community; and 3) libraries develop new and effective communication strategies for disseminating relevant health information to audiences with differing levels of health literacy.

The literature on health information outreach/programming in public libraries primarily consists of reports of how individual libraries designed and implemented a specific health information program. Ren, Potemkin and Cogdill (2009) detailed how a public library at the Texas-Mexico border organized children's health fair and other health oriented programs during the summer. Woodson, Timm and Jones (2011) explained a Louisiana public library's partnership with a medical library in teaching kids about healthy lifestyles through stories and games. Malachowski (2014) reported a partnership between public libraries and a medical library that provided health literacy instruction through hands-on computer classes. Public libraries offered community meeting space, literacy support, and access to Internet and print materials, helping expand the reach of health literacy instruction out of the clinical setting and into the towns and cities that they serve. Flaherty and Grier (2014) depicted a statewide initiative where consumer health librarians were embedded in public libraries to provide health information services. Morgan et al. (2016) studied the impact of the Healthy Library Initiative, a partnership between the Free Library of Philadelphia (the public library system that serves the city) and the University of Pennsylvania that provided specialized programs to address multiple health determinants, such as housing and literacy. Their findings suggested that public libraries are trusted institutions that have broad population reach and untapped potential to improve population health.

Whitney, Dutcher and Keselman (2013) analyzed articles about library programs focusing on providing access to health information resources, raising awareness of authoritative health

information resources on the Internet, or teaching how to find and evaluate health information. Findings indicated that successful programming was usually enabled by collaborating with community-based organizations, conducting community assessments prior to the intervention, and using behavior change theories or established research in the training of specific populations (e.g., older adults). Barriers included high attrition rates in multi-session programs or low attendance in single-session programs, scheduling constraints, problems with recruitment, lack of previous computer or Internet experience, and funding issues.

Rubenstein (2015) investigated two public library systems in Oklahoma to understand how health literacy was addressed and librarians' perceptions about it. Her study identified several challenges librarians encountered when providing health information and developing programs, including staff and patron difficulties with reference interviews, and patron lack of awareness of library resources. Findings also indicated that staff members often had only a partial understanding of health literacy, and were unaware of system strategies to address health literacy or provision of health information. Such findings highlight the need for more research on public libraries' efforts in promoting health literacy through services and programs.

The Healthy People 2020 initiative identifies ten leading health indicators that are being used to measure the health of United States citizens, such as access to health services, nutrition, physical activity and obesity, and mental health (ODPHP 2018). Gillaspay (2005) believed that these health indicators have meaningful implications for public libraries' collection development and programming, and called for more research and practice in this regard. In response to this call, this study provides a comprehensive view of a large urban public library system's health information programs, hoping to enrich the literature and grow the professional knowledge in this increasingly important area in public librarianship.

### **Study Design**

Content analysis was conducted to examine health information programs provided by San Jose Public Library (SJPL) in 2017. SJPL has twenty-four branches, serving the entire city of San Jose. Located at the southern end of the San Francisco Bay Area, San Jose was founded in 1777 as California's first civilian settlement, and now is the largest city in Northern California. According to the 2014 American Community Survey, San Jose has a diverse population of 1.04 million, among which 34.2% are Asian, 32.8% are Hispanic, and 26.7% are white. Only less than half (43.2%) of the population speak English at home; among the rest, 23.5% speak Spanish, and 25.6% speak

Asian/Pacific Island languages. In terms of educational attainment, 40% have bachelor's degree or higher, 25% have associate degree or some college (no degree), and 18% have high school diploma or equivalent (City of San Jose, 2018).

The website of SJPL lists all the library programs and events under the "Events" page. Figure 1 presents a screenshot of the "Events" page. Since the study focused on health information programs, only the "Health and Wellness" category on the "Events" page was selected. Under that category, the programs provided every day from Jan 1 to Dec 31, 2017 were collected as the data set for analysis. For each program, the data set contained the program title, program announcement, dates when the program was offered, and name of the branch library where the program occurred.

[Insert Figure 1 here]

The unobtrusive research method, content analysis, was employed to analyze the data both quantitatively and qualitatively. Quantitative analysis sought to describe the features of the content numerically, and qualitative analysis allowed the content to be combed for themes and patterns through rounds of coding (see Appendix for the codebook used in this content analysis).

## **Results**

In the year of 2017, a total of 76 health information programs were offered at SJPL, ranging across five topical categories. Table 1 shows that the most popular topical category was "health knowledge and resources". More than half of the programs fell under this category, aiming to augment the public's awareness and knowledge of a wide variety of health-related issues, including healthy lifestyle (healthy eating, drinking, and cooking), holistic and harmonious living, disease prevention and treatment (anxiety disorder, diabetes, heart diseases, mental health, alcoholism, etc.), stress management, and life skills to improve overall well-being (self-defense, self-empowerment, self-esteem, etc.) The second most popular category was "healthy physical activity", where the programs provided opportunities for the public to participate in physical activities with health benefits. Such programs covered biking, yoga, Bollywood dance, line dance, dancersize, meditation, music and movement for children, and culturally-themed physical activities such as Mexican Folkloric dance, Aztec dance, and Chinese Five Animal Exercise.

[Insert Table 1 here]

SJPL's health information programs were provided in various formats. As shown in Table 2, the prevalent format was "workshop", and most programs under the topical category "health knowledge and resources" were delivered in workshops. "Exercise", second in popularity, was the format for

all the programs under “healthy physical activity”. All the programs under “basic health needs” and some under “health care” were provided as a “service” – services such as free lunch, free snacks, free vision screening, and assistance in health care program enrollment were offered for the benefit of the public.

[Insert Table 2 here]

The health information programs at SJPL were provided at different frequencies, as shown in Figure 2. A little more than one quarter of the programs were one-time programs, and among the recurring programs, it is worth noting that three were offered over 100 times. These three programs were – free snacks for children and teens (125 times), free summer lunch for children and teens (132 times) and Mexican Folkloric Dancing Class (147 times).

[Insert Figure 2 here]

Most of SJPL’s health information programs were provided at one branch, and about 15.8% were held across multiple branches. For instance, two of the three most frequently offered programs, free snacks and free summer lunch were both available at three different branches. The program delivered at the most number of branches (11 branches) was Advance Health Care Planning, where a representative from a health care organization comes to discuss advance health care planning and how to complete an advance health care directive. Another noteworthy multiple-branch program was 2017 annual SJPL Tour by Bicycle, which is a guided community and staff bicycle ride that visits four branch libraries, and the 15-mile ride stops at each library to regroup.

For each health information program, a program announcement was linked to detail what the program was about. English was the language for the majority of the announcements (82.9%), and among the rest, 11.8% were in both English and Spanish, 3.9% were in Spanish only, and 1.3% were in English, Spanish and Vietnamese simultaneously.

The programs were designed for various populations in the user community. A total of 46 (61.8% of all programs) of the programs indicated the target audience in program titles or announcements. Table 3 provides an overview of who these audiences were. As for the rest of the programs where the target audiences were not specified, a review of the program announcements suggested that adults or anybody with an interest in the program topic and the ability to comprehend the program content, would most likely benefit from these programs.

[Insert Table 3 here]

Partnering with the community is indispensable in implementing meaningful library programs. For SJPL's health information programs, 56.6% of the program announcements explicitly stated the organizations or individuals that the library worked with to provide the program. The organizations included non-profit groups (e.g. Health Trust), health care organizations (e.g. Kaiser Permanente), and government agencies (e.g. Santa Clara County Department of Health); the individuals ranged from scholars (e.g. a professor from Stanford University), medical experts (e.g. a healing family mentor), and certified fitness instructor (e.g. a yoga instructor). It is worth noting that even though the rest of the program announcements did not specify a community partner, it does not necessarily mean that they were provided without community partnership.

### **Discussion**

Grier (2010) posited that the best practices for consumer health information in public libraries should include 1) forming strategic partnerships that include public libraries, medical libraries, and community organizations and agencies; 2) assessing community needs and plan the scope of service; 3) provide consumer health information at the time of need and at the point of service; 4) offering current, reliable and accurate sources of information; 4) promote and market the service widely; and 5) developing plans to sustain and/or expand the service. SJPL' health information programs highlighted two aspects of the best practices – partnering with community organizations and agencies, and reflecting the needs of the community.

SJPL not only engaged community partners in providing workshops, leading exercises and offering services at the library, but also actively participated as a partner in community-wide health initiatives such as supporting Bike to Work day in the Bay Area (the library invited people to pick up a free Bike to Work bag on that day, and encouraged the public to read more about bicycles and biking by noting relevant library resources in the program announcement). Meanwhile, the wide variety of health information programs at SJPL indicated alignment with the community's needs. The programs aimed to promote the public's awareness/knowledge of and behavior on the top health indicators identified by The Healthy People 2020 initiative, such as access to health services, nutrition, physical activity and obesity, and mental health. The programs also accommodated the ethnic and cultural diversity in the community and took into consideration the needs of different age groups. For instance, one of the most frequently offered programs was Mexican Folkloric Dancing Class, which corresponds with the high percentage of Hispanic population in the community served by SJPL.

Based on this analysis of SJPL's health information programs, the following ideas are yielded to help public libraries improve their programming and outreach efforts to enhance the community's health literacy.

- 1) *Varying program formats (e.g. workshops, exercises, stories/performances, etc.) helps accommodate diverse health needs and endorse the library's role as an advocate for healthy lifestyle as well health literacy in the public.* For instance, workshops on popular health topics and resources not only increase the public's health awareness and knowledge, but also provide opportunities to highlight relevant collections in the library and likely lead to usage growth; group exercises such as yoga or line dance represent free and convenient ways for the public to engage in healthy physical activities, reinforcing the social role of the library and promoting "Library as Place" instead of merely a storehouse of books.
- 2) *To increase program attendance, it is important to consider potential barriers that might prevent the target audience from participating and address them properly.* For instance, some of SJPL's programs aimed to help parents and caregivers integrate healthy lifestyles within their homes. When interested parents register for the program, they can include information about their child (e.g. name and age) and the program organizer would arrange for childcare while they participate in the program. Such arrangement can alleviate parents' concerns so that they are more motivated to join.
- 3) *Inclusive programming is vital to ensure the health needs of different ethnic groups and different age groups are well considered and well covered.* It is necessary to develop a comprehensive understanding of the demographics of the user community as well as each demographic group's outstanding health concerns, and thus design the programs accordingly. Attention should also be given to special populations, such as people who are socially and economically disadvantaged and lack access to health literacy education. For instance, SJPL's programs enabled relevant services and support groups to reach out to people who suffered alcoholism, homelessness, or physical/mental abuse, and offered free lunch and snacks to children in poverty.
- 4) *Public libraries can take initiatives to connect the library image with the movement toward a healthier society and thus positively impact people's perception of the library.* A good example of such initiatives was SJPL's annual bicycle tour. It is a guided bicycle ride that visits several SJPL branches en route. Organized by SJPL, the tour attracts not only library staff, but also community members who are biking enthusiasts. This annual program can

help amplify the library's efforts and leadership in promoting healthy living, and hence strengthen the positive image of public libraries among the community.

- 5) *Community partners are indispensable in successful programming.* There are abundant community resources and expertise that public libraries can seek out and partner with in health information programming. For instance, SJPL's community partners included non-profit health groups, health care organizations, government agencies, health scholars, medical experts, and certified fitness instructors. Community partnership is mutually beneficial – it not only supports libraries' programming efforts, but also helps establish the library as a trustworthy partner that other community members can collaborate with for their own health-related causes. In addition to community partner, it is also beneficial to nurture partnerships with the medical library community. In 2017, PLA and the National Network of Libraries of Medicine (NNLM) announced a "Promoting Healthy Communities" partnership to develop medical information to be used by public libraries working with general audiences. Such partnerships can be extended beyond information resources and into the realm of programming as well. Medical librarians' expertise may help public librarians explore a wealth of possibilities in providing engaging and effective health information programs to the public.
- 6) *National health priorities can help guide programing in public libraries.* There is a vast number of health-related topics that library programs can focus on. Given the limited programming budget and resources, public libraries may consider using national health priorities as a guide. For example, the top health indicators identified by Healthy People 2020, the Department of Health and Human Services' project that provides science-based, 10-year national objectives for improving the health of all Americans, can be consulted when deciding what to focus on in health information programming in public libraries.

## **Conclusion**

Library programs are a critical platform for public libraries to conduct community outreach.

Through effective and efficient health information programs, public libraries can help bolster the public's health awareness and knowledge, broaden their access to quality health information and ultimately contribute to a more health-literate citizenry. Through a detailed delineation of the topics, formats, frequencies and audiences of one large urban public library's health information programs, this study seeks to strengthen the professional understanding of health information programming and generate ideas that could benefit other public libraries' programming efforts. Findings of the

study may also assist professional organizations such as PLS in establishing professional guidelines for health information programming and outreach, and encourage public libraries to more actively engage in the movement to improve the nation's health literacy through optimal services and programs. Educators can also draw upon the study to enrich the public librarianship curriculum at library and information degree programs.

It is necessary to note that the study is limited in that it only focuses on one public library system and the content analysis only provides a depiction of the variety of health information programs without examining how the programs were planned, implemented and evaluated. Building upon the study, future research may focus on expanding to more public libraries and investigating health information programming at a larger scale, analyzing public libraries' decision making process of planning and offering health information programs, and scrutinizing the efficacy of health information programs and exploring programming efforts from the user perspective.

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