



Dental Public Health Activities & Practices

Practice Number: 48005
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SECTION I: PRACTICE OVERVIEW		
Name of the Dental Public Health Activity: Greater Memphis Area Special Olympics Special Smiles Program		
Public Health Functions: Assessment – Acquiring Data Assessment – Use of Data Policy Development – Collaboration and Partnership for Planning and Integration Assurance – Building Linkages and Partnerships for Interventions Assurance – Access to Care and Health System Interventions		
Healthy People 2010 Objectives: 21-1 Reduce dental caries experience in children 21-2 Reduce untreated dental decay in children and adults 21-5a Reduce gingivitis among adults 21-10 Increase utilization of oral health system		
State: Tennessee	Federal Region: Region IV South	Key Words for Searches: Special Olympics, Healthy Athletes, Special Smiles Program, oral screenings, oral hygiene instruction, special health care needs, special needs, disabilities
Abstract: <p>The Memphis Special Olympics Special Smiles Program is an annual event developed and initiated in 1999 and held in conjunction with the Greater Memphis Area Special Olympics Track and Field Competition. Each year Special Olympics Athletes, aged 8 to 60 years, receive dental screenings, oral hygiene instruction, nutritional counseling, and commemorative canvas bags containing a toothbrush, toothpaste and dental health education information. This annual event brings together University of Tennessee dental faculty, dental residents, students and staff, hospital personnel, private dental practitioners, dental hygienists, dental assistants and community lay persons who work side by side to conduct the screenings and provide the dental prevention instruction. The Special Olympics Special Smiles Program receives financial support from the Memphis Dental Society, Special Olympics, and several corporate sponsors to underwrite the cost of the program which averages \$3,500.00 per year. All of the dental supplies needed to conduct the screenings are supplied by Patterson Dental Company. To date over 4,000 athletes have participated in this dental health education program. Professional volunteers staffing the event averages 60-70 per year. Access to comprehensive dental services has improved in the local community due to the increased awareness by dental professionals and recent graduates regarding the dental health care disparity endured by individuals with intellectual disabilities. After participating in the Special Smiles Program, many practitioners become comfortable welcoming patients with intellectual disabilities into their practices.</p>		
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SECTION II: PRACTICE DESCRIPTION

History of the Practice:

The Memphis Special Olympics Special Smiles (SOSS) Program began in response to the national effort by Special Olympics to expand their Healthy Athletes Initiative to the local community level to improve access to dental services for their athletes in their hometowns. The inaugural event was held during the Greater Memphis Area Track and Field Competition on the campus of the University of Memphis in April 1999. This event was supported by the local Special Olympics Administration, the University of Tennessee College of Dentistry, the Memphis Dental Society, and the FedEx Corporation. This event brought together individuals from dental academia, private practice, organized dentistry, corporate America, and community laypersons for the benefit of the local Special Olympics Athletes.

The Memphis SOSS Program has enjoyed significant growth in the number of athletes screened at each individual event as well as the number of professional volunteers involved. At the first event, 275 athletes received a dental screening, oral hygiene instruction, and nutritional counseling provided by 40 volunteers. These numbers have increased to over 500 athletes screened by 60-70 volunteers at the most recent event. There has also been an additional support from organized dentistry and corporate and includes the Tennessee Dental Association, Cargill Corporation, The Memphis Redbirds Baseball Organization, and the Kroger Company.

In 2004, the Greater Memphis Area SOSS Program began utilizing the Healthy Athletes Software (HAS) System. This new system allows the data for the athlete to be entered electronically and maintained confidentiality. A unique identifier is assigned to each athlete who then receives an integrated personal report card for all screenings describing services and results.

Justification of the Practice:

Access to medical and dental health care services by individuals with intellectual and other developmental disabilities continues to be a national problem as highlighted in the 2002 Surgeon General's Report on Mental Retardation and Health Disparities. Adequate dental services for individuals of all ages with intellectual disabilities remains the greatest reported unmet national health care need.

In 1990s, the leadership of the Special Olympics Movement recognized that their athletes would be better able to compete in sporting activities if correctable medical and dental problems could be eliminated or reduced. Special Olympics initiated its Special Smiles Program in 1993 providing dental screenings to the participating athletes. Nationally, SOSS events usually screen 40-60% of the athletes. Most of the dental screening events are held during a statewide Special Olympics Games.

The Memphis SOSS Program provides dental screenings, oral hygiene instruction and nutritional counseling at the local Special Olympics. The program is able to pair athletes and dentists residing in the same community. Having a dental screening event at the local event has the advantage of reaching athletes who do not advance to the state competition. The local event helps the dental professional recognize the dental needs of vulnerable citizens in their community and is better able to facilitate access to dental care for the athletes with a local provider. At the Tennessee Special Olympics Games, the SOSS Program screens athletes from all across the state but most volunteer dentists live in or close to Nashville (site of the state event). A grassroots program is better able to connect athletes and dentists from the same community.

Inputs, Activities, Outputs and Outcomes of the Practice:

Inputs

Planning for the annual Memphis SOSS Program begins several months before the event takes place and involves the SOSS Director, SOSS Data Coordinator, and the Greater Memphis Area Special Olympics Executive Director.

Interactions with interested dentists at local dental study clubs and other professional meetings, such as the MidSouth Dental Congress or Memphis Dental Society, are used to obtain volunteer commitments. The University of Tennessee College of Dentistry Faculty are advised of the upcoming SOSS event at administrative meetings and by campus email. Dental students and residents are encouraged to volunteer during lectures and seminars highlighting the dental management of individuals with intellectual and other developmental disabilities.

Letters are sent to the Memphis Dental Society, Tennessee Dental Association, local dental study clubs, and corporate sponsors in December announcing the date of the upcoming SOSS Program in April encouraging financial and personnel support.

The Memphis SOSS Director coordinates the planning for the dental screening event with the Greater Memphis Area Special Olympics Executive Director. The SOSS Data Coordinator prepares the necessary forms to record each athlete's screening data. The Data Coordinator is also responsible for entering the data electronically using the Special Olympics HAS System. The University of Tennessee College of Dentistry, Department of Pediatric Dentistry and Community Oral Health's Office Manager is responsible for typing letters of correspondence and tracking the shipment of dental supplies.

The annual Special Olympics Track and Field Competition was chosen as the best venue because most of the local athletes participate in at least one sporting event during this competition. In February, the national Special Olympics office is notified of the anticipated number of athletes expected to compete so that the necessary dental supplies and preassembled goody bags can be shipped to the College of Dentistry about two weeks prior to the scheduled event date. A local print company is employed to produce the commemorative canvas bags and t-shirts to be given to the athletes and volunteers.

A typical dental screening event will have approximately 60 volunteers including 12 dentists, 10 pediatric dentistry residents, 5 dental hygienists, 10 dental assistants, 10 dental students, 5 dental hygiene students and 8 community laypersons.

Activities

During the evening before the SOSS event, the venue is set up with the table and chairs arranged to accommodate the individual registration, dental screening, oral hygiene instruction/nutritional counseling and exit areas. Dental supplies and data forms arranged for the screenings. Banners provided by Special Olympics are strategically placed to attract athletes to the venue.

On the day of the SOSS event, dental faculty, residents, students and private practice clinicians conduct the dental screenings while dental hygiene students and community hygienists provide the oral hygiene instruction and nutritional counseling. Volunteers staff the registration desk and exit table where athletes receive their commemorative canvas bag. Volunteers also serve as escorts to assist the athletes in visiting each station in the SOSS venue. Screenings occur before, during and after the sporting competitions in order to accommodate the largest number of athletes. This strategy allows over 95% of the athletes in attendance to be screened. The escort program offers a one-on-one friendly experience which entices athletes to participate in the SOSS event. The one-day event runs about 5 hours.

Collecting data on the Memphis athletes is a very important part of the SOSS Program. The new Special Olympics HAS System will allow the program to longitudinally monitor the oral health status of each athlete and to make appropriate recommendations for care when necessary.

Outputs

To date, over 4,000 Special Olympics Athletes have participated in the Memphis SOSS events averaging about 500 athletes per year. Each athlete receives a report of his/her overall oral health status as well as important oral hygiene and nutrition information which can be shared with parents, coaches and teachers. If an athlete does not have a primary dental provider, the names of dentists accepting patients with intellectual disabilities are provided.

The SOSS Program has provided a better appreciation of the importance of serving individuals with intellectual disabilities for approximately 80 former dental students, 40 dental hygiene students and 40 pediatric dentistry residents who have entered the health care workforce as well as 20 local dentists.

Data collected on the Memphis athletes is submitted to the national Special Olympics office where it is compiled with other data from athletes throughout the U.S. and the world. This global oral health data set is the most comprehensive documentation available for this most vulnerable population and has been utilized in several research studies to substantiate the level of untreated decay, periodontal disease, traumatic injury, missing teeth and oral pain found in individuals with intellectual disabilities.

Outcomes

The SOSS Program is well received by the participating dental professional volunteers. Dentists receive continuing education credits for their involvement in the screening program. Exit forms completed by the professional volunteers have noted that the clinical experience has been very worthwhile and most participants volunteer the following year.

Several recent graduates have reported that they provide dental services for patients with intellectual disabilities in their private practices and they have commented that their earlier student involvement with the SOSS Program was an important factor welcoming individuals with special needs to their practices.

The oral health of the athletes is improving as noted by the data for untreated decay. In 2002, the percentage of untreated decay for anterior teeth, premolars and molars was recorded as 5.8%, 7.4% and 35.9% respectively. In 2005, the percentages for untreated decay for the same categories were recorded as 4.1%, 1.7% and 24.2% respectively with each category demonstrating a reduction in untreated decay compared to the 2002 data.

The Memphis Special Olympics Executive Director has noted that the athletes, parents, special education teachers, Special Olympics coaches and community leaders were very satisfied with the success of the SOSS Program, the interaction with the College of Dentistry, and the involvement of the local dental health care community.

Budget Estimates and Formulas of the Practice:

The cost for operating the Memphis SOSS Program is underwritten by the Memphis Dental Society and several local corporate sponsors. All of the dental supplies are donated by Patterson Dental Corporation. FedEx Corporation provides the tent, tables and chairs at no cost and the volunteers for setting up and dismantling the SOSS venue. In addition, the University of Memphis provides its athletic facilities at no cost to Special Olympics and the SOSS Program. The Memphis Dental Society and Cargill Corporation underwrite the cost of the canvas bags (\$4.50 per bag) given to each athlete and the commemorative t-shirts (\$8.00 per shirt) given to each dental volunteer. The SOSS Program purchases 600 canvas bags and 100 t-shirts each year. Extra bags and t-shirts are given to selected civic and corporate sponsors.

The annual cost (not including in-kind support from Special Olympics, Patterson Dental Corporation or FedEx) is \$3,500.00 or \$7.00 per athlete screened. The in-kind support is approximately an additional \$13,250. The grand total including in-kind and actual cost for providing a dental screening for, on average, 500 athletes per event is \$16,750.00.

Lessons Learned and/or Plans for Improvement:

Having dental students and recent graduates work with individuals with intellectual disabilities in a controlled learning environment increases the likelihood that the young clinicians will welcome patients with special needs into their practices. Even seasoned dental practitioners who volunteer gain more understanding and gain a higher comfort level working with individuals with developmental disabilities.

The SOSS Clinical Director makes it a point to attend the annual MidSouth Dental Congress convened in early March in Memphis, Tennessee. Typically, 500 or more dentists participate in this dental meeting and the venue is a good place to recruit new dentist and dental hygienist volunteers for the SOSS Program. Dentist participants are encouraged to bring their colleagues, office staff, and friends to the SOSS Program. Word of mouth appears to be an excellent way to increase professional participation.

Over the years, the SOSS Program has learned how to maximize the number of athletes who will visit the SOSS Program. The SOSS venue is typically set up near the finish line for the track competitions. The registration desk has complimentary bottles of water for athletes who participate in the dental health screening program. The Memphis Special Olympics Executive Director periodically announces the availability of the SOSS Program over the PA system. The SOSS Clinical Director visits with the coaches from the individual Special Olympics Teams during the Memphis Games to encourage athlete participation in the SOSS Program.

Available Information Resources:

The Special Olympics website (www.specialolympics.org) provides several available documents relevant to their Special Olympics Special Smiles Program:

- Horwitz SM and others. The Health Status and Needs of Individuals with Mental Retardation. Dept of Epidemiology and Public Health, Yale University School of Medicine; Dept of Psychology, Yale University, New Haven, CT, December 2000.
- Closing the Gap: A National Blueprint to Improve the Health of Persons with Mental Retardation. Report of the Surgeon General's Conference on Health Disparities and Mental Retardation. Rockville, MD: U.S. Dept. of Health and Human Services, Public Health Service, Office of the Surgeon general; Washington, D.C., 2002.
- The Health and Health Care of People with Intellectual Disabilities: Changing Attitudes, Changing the World. February 2005.
- White JA and others. Training Manual for Standardized Oral Health Screening, Division of Oral Health, National Center for Chronic Disease and Health Promotion, Centers for Disease Control and Prevention, November 2004.

SECTION III: PRACTICE EVALUATION INFORMATION

Impact/Effectiveness

How has the practice demonstrated impact, applicability, and benefits to the oral health care and well-being of certain populations or communities (i.e., reference scientific evidence, outcomes of the practice and/or evaluation results)?

The Memphis SOSS Program has served over 4,000 local Special Olympics athletes with intellectual disabilities. The program provides up-to-date information on oral hygiene and good nutrition, gives feedback on oral health status after a dental screening, and assists in identifying an available dental provider. Dental professional and community volunteers have gained an enlightened understanding about individuals with special health care needs and become more empathetic to the health care disparities observed in this population. Dentists in other parts of Tennessee have expressed an interest in replicating the success of the Memphis program in their own communities.

The oral health of the athletes is improving as noted by the data for untreated decay collected at the SOSS events and tracked longitudinally.

Efficiency

How has the practice demonstrated cost and resource efficiency where expenses are appropriate to benefits? How has the practice demonstrated realistic and reasonable staffing and time requirements? Provide unit cost analysis or cost-benefit analysis if appropriate.

The Memphis SOSS Program has proven to be a very cost efficient project due to its volunteer personnel and community exposure. The Memphis SOSS Program has allowed academia, the private practice sector, organized dentistry, charitable civic organizations, and corporations to come together to serve individuals with intellectual disabilities. The cost of operating the program is \$7.00 per athlete (not including in-kind contributions).

Demonstrated Sustainability

How has the practice showed sustainable benefits and/or how has the practice been sustainable within populations/communities and between states/territories? What mechanisms have been built into the practice to assure sustainability?

The Memphis SOSS Program has been in operation since 1999 and has been able to find a sufficient number of professional and non-professional volunteers to sustain the program each year and serving an increasing number of Special Olympics athlete each year.

Collaboration/Integration

How has the practice built effective partnerships/collaborations among various organizations and integrated oral health with other health projects and issues? What are the traditional, non-traditional, public and private partnerships/collaborations established by the practice for integration, effectiveness, efficiency and sustainability?

The Memphis SOSS Program has built effective partnerships throughout the years including the University of Tennessee, University of Memphis, local private practitioners, allied health care professionals, the Memphis Dental Society, Crittenden Regional Hospital staff, local civic organizations, and corporations. The SOSS Director has lectured on the management of patients with developmental disabilities to dental students and residents at the University of Tennessee. The SOSS Director has also made presentations to the Memphis Dental Society, Crittenden Regional Hospital staff, and local dental study clubs. He has also successfully solicited financial and personnel support from local charitable civic organizations, religious groups, and business corporations through meetings and presentations.

Objectives/Rationale

How has the practice addressed HP 2010 objectives, met the call to action by the Surgeon General's Report on Oral Health, and/or built basic infrastructure and capacity for state/territorial oral health programs?

The Memphis SOSS Program has increased utilization of the oral health system by individuals with intellectual disabilities through appropriate referrals for Special Olympics athletes. The program has

demonstrated the disparate oral health status observed in individuals with developmental disabilities through data collection on untreated decay, gingivitis and dental trauma found during the oral screening of Memphis Special Olympics athletes. The program responds to the call to action by the Surgeon General's Report on Health Disparities and Mental Retardation.

Extent of Use Among States

Describe the extent of the practice or aspects of the practice used in other states?

The Memphis SOSS Program is part of the national Special Olympics Healthy Athletes Program which provides dental screenings, dental hygiene instruction, and nutritional counseling.