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# Oral Health Life Skills Education for Foster Youth in Transition: An Exploratory Evaluation Study

by

Nina Karhinen, RDH, BSDH

A thesis

submitted in partial fulfillment

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## Committee Approval

To the Graduate Faculty:

The members of the committee appointed to examine the thesis of Nina Karhinen find it satisfactory and recommend that it be accepted.

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Idaho State University Office for Research - Research Outreach & Compliance

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July 9, 2018

Dear Ms. Karhinen,

Your study: Oral Health Life Skills Education for Foster Youth in Transition: An Exploratory Evaluation Study has been determined to be an assessment and does not fall under the definition of research as defined in Title Code of Federal Regulations, Part 46[45CFR 46].

Research is defined as:

> Federal research regulations and the Health Insurance Portability and Accountability Act of 1996 (HIPPA) define research as "a systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge." The first of these two elements—the use of a systematic investigation—may be a characteristic of both research and non-research projects. Public health practice, quality assessment (QA) and quality improvement (QI) programs, resource utilization reviews, and outcome analyses are examples of non-research activities that frequently use statistical and other scientific methods to collect and analyze data in a manner that is identical to research studies... The primary goal of the activity must be to develop or contribute to generalizable knowledge to be called research.

A list of activities that are not research is: Quality Assessment, Quality Assurance, Case Report or Case Series, Needs Assessment, Medical Practice and Innovative Therapy, Medical Practice for the Benefit of Others, Public Health Practice, Outcome Analysis, Resource Utilization Review, and Education.

Your proposed study is not subject to review by the Human Subjects Committee and may be conducted as submitted.

Sincerely,

Tom Bailey

Coordinator, Human Subjects Committee

## Dedication

This thesis is dedicated with love to my husband, Mark and my children Sonja, Zachary, and Jakob. I also owe a debt of gratitude to my friends and family. You know who you are. Without your combined patience, love, and support, this journey would not have been successful.

**Acknowledgement**

Foremost, I would like to express my sincere gratitude to my thesis advisors, Denise Bowen and Jacque Freudenthal, for the continuous support of my research and for their constant patience, motivation, enthusiasm, and expertise. My sincere gratitude to Dr. Mark Neill for his time and guidance. To the validity expert panel, your contribution is appreciated.

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## List of Abbreviations

| | |
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| CSHCN | Children with special health care needs |
| FC | Foster care |
| ILS | Independent life skills |
| ILP | Independent living program |
| YIT | Youth in transition |

Oral Health Life Skills Education for Foster Youth in Transition:

An Exploratory Evaluation Study

Thesis Abstract—Idaho State University (2018)

This exploratory evaluation project addressed the need for oral health education for foster youth in transition (YIT) by developing an online independent life skills (ILS) oral health education program, collecting pilot data to explore perceptions of YIT and caseworkers regarding the program, and proposing a model course as a potential solution. Three private sector ILS program agencies invited YIT to enroll in the online ILS course facilitated by their caseworkers. Participants (N=13) and caseworkers (N=3) completed validated post-course evaluations. YIT agreed/strongly agreed the course was easily navigated (92%), and course topics were relevant to them (85%) and helpful, especially regarding regular dental care, healthy eating habits, oral hygiene techniques, and finding a dentist, and handling dental emergencies (100%). Caseworkers reported the program was appropriate for YIT. Initial evaluation indicates a consensus among YIT participants and caseworkers that the model course was informative. Widespread use and evaluation is recommended.

Key Words: Foster youth; Foster care; Foster home care; Oral health; Transition

## Chapter 1: Introduction

Currently, our nation has over 400,000 children (0-18 years) within the foster care (FC) system. The most current data indicated 20,532, or 8%, of young adults "age out," or transition out of the FC system by their 18th birthday annually (United States Department of Health and Human Services [HHS], *Adoption and Foster Care Analysis and Reporting System*, [Report No. 24], 2016a). Both FC and youth in transition (YIT) are susceptible to various physical and psychosocial health conditions due to adverse childhood experiences (ACEs), defined as any physical, sexual, and emotional abuse (including neglect), domestic violence exposure, substance misuse and/or mental illness within the household, parental separation/divorce, or household member incarceration. An increased number of ACEs affect both children's and adolescents' oral health (Substance Abuse and Mental Health Services Administration [SAMHSA], 2016; Bright, Alford, Hinojosa, Knapp, & Fernandez-Baca, 2015). Furthermore, YIT are more likely to experience food insecurity, lower educational attainment, unemployment, and risky behaviors including early pregnancy, victimization, and crime than their peers (Lee & Morgan, 2017).

Research shows an upward trend in children accessing dental services nationally; whereas, vulnerable children living in poverty with medically and developmentally compromised needs experience a gap in dental services (Waldman, Ackerman, & Perlman, 2014). Further, the same vulnerable subpopulation of children continues to face difficulties accessing services in early adulthood (Waldman et al., 2014). Mental health and other behavioral problems such as depression, anxiety, and posttraumatic stress disorder are common within the maltreated FC youth population (US Department of HHS, Administration for Children and Families [ACF]: NSCAW II WAVE 3 [Report], 2014). Due to the significant prevalence of overall health problems manifested in the FC population over the last several decades, the American Academy

of Pediatrics (AAP) has classified this population as children with special health care needs [SHCN] (Rosen, Ruben, & Zlotnik, 2015). The American Academy of Pediatric Dentistry (AAPD) also has recognized the difficulties of transitioning patients with SHCN to a dental home and has developed policies, including the recommendation of an up-to-date detailed written transition plan for oral health in collaboration with adolescents and their families (AAPD, 2016a; AAPD, 2016b). Thus, it is crucial to educate YIT about the importance of oral health care as it relates to their transition into adulthood.

A transition plan describes an individual's goals, as well as the actions and support systems required to achieve those goals as they emancipate from FC. Under federal guidelines, the plan must include "specific options on housing, health insurance, education, local opportunities for mentors and continuing support services, work force supports, and employment services" (United States Department of Education, 2016, p. 6). Moreover, a caseworker or appropriate child welfare professional must provide assistance and support in developing the individualized and youth-led plan with as much detail as the youth chooses. The Patient Protection and Affordable Care Act (ACA) amended the transition plan provision to require that youth be educated about the importance of designating someone who can make health care decisions on their behalf when necessary (Child Welfare Information Gateway, 2013a). The state also is required to provide independent living program services for adolescents currently or formerly in state care between the ages of 14-21 years to assist youth with daily living skills (DLS), educational achievement, income maintenance, housing, interpersonal skills, health, etc.; however, programs are not mandatory for youth (U.S. Department of Education, 2016).

Due to the autonomous nature of transition planning and independent living programs, oral health education offered to YIT prior to emancipation content is variable at best. Therefore, YIT and agencies that assist YIT with transition need effective mechanisms for developing oral health education components of these plans. This exploratory evaluation project examined YIT and transition caseworker perceptions of an online oral health education program designed to improve dental outcomes for youth in transition in order to develop such a program and make it available online for social workers and YIT.

**Statement of the Problem**

There is a need to offer an oral health independent living skills (ILS) course for YIT as part of their overall transition plan to address an identified gap in oral health care services for these youth. The American Academy of Pediatric Dentistry encourages a transition plan that includes an oral health plan prior to emancipation.

**Purpose of the Study**

The purpose of this exploratory evaluation study was to address the need for oral health education for YIT by developing and presenting an online ILS oral health education program, using the findings of a pilot study to examine the perceptions of YIT and caseworkers regarding an online oral care education program, and to identify barriers associated with the implementation of this oral health care education program.

**Significance of the Study**

This program evaluation supports the American Dental Hygienists' Association Research Agenda (2016a), National Dental Hygiene Research Agenda Priority Area of Research at the Population Level, and Testing and Evaluating Community Interventions, by evaluating an

educational intervention to meet the needs of YIT. More specifically, the study assessed perceptions of participating foster youth at the time of emancipation and perceptions of the caseworkers assisting them with this transition regarding the appropriateness and navigation of an online ILS course designed to address oral health education as part of the overall transition plan. The outcome of this study has the potential to complement the existing ILS programs used by YIT prior to emancipation. Results from this exploratory evaluation provide information about participants' and caseworkers' perceptions and the structure, content, and feasibility of an online oral health education ILS course that was implemented for YIT prior to emancipation.

**Research questions**

1. What aspects of the online independent living skills oral health course do the foster youth participants approaching emancipation perceive were beneficial to them in relation to their own oral health in the future?
2. What aspects of the online independent living skills oral health course do the foster youth participants approaching emancipation perceive need improvement to address their own oral health in the future?
3. What aspects of the online independent living skills oral health course do the facilitating caseworkers perceive were beneficial to participating foster youth as they prepare for emancipation?
4. What aspects of the online independent living skills oral health course do the facilitating caseworkers perceive need improvement to address the oral health needs of foster youth approaching emancipation in the future?

5. What content should be included in a model independent living skills oral health educational program for foster youth approaching emancipation?
6. What challenges must be addressed to implement an online oral health ILS education program where a dental hygienist provides an oral health ILS educational program?

**Definitions**

**Attitudes.** Attitudes are transitional variables influencing health (Mason, 2010). Increasing participants' oral health knowledge may elicit a positive attitude towards preventive oral health behaviors. In this exploratory evaluation study, attitudes were assessed in a post-course evaluation.

**Knowledge.** Knowledge is a transitional variable affecting health (Mason, 2010). In this exploratory evaluation study, knowledge was assessed in a post-course evaluation.

**Emancipation.** To age out (age out– refers to the termination of court jurisdiction over foster care youths) and leave the foster care system (United States Department of Education, 2016). In this exploratory evaluation study, emancipation is mentioned in the context of a YIT leaving the FC system and being required to develop a federally-mandated transition plan ninety days prior to emancipation.

**Dental Hygienist.** A dental hygienist is a licensed oral health care provider whose primary objective is to prevent, identify, and treat early-stage oral disease (ADHA, 2016b). In this exploratory evaluation study, a dental hygienist designed and provided an online oral health independent living skills pilot program for YIT. Perceptions of the participants and the facilitating caseworkers regarding the pilot online oral health independent living skills course were assessed with post-course evaluations.

**Independent Living Program (ILP)**. Pursuant to section 475 of the Social Security Act, the State is required to develop and implement a case plan that, for children age 15 (age 14 in some states) and older, identifies those programs and services that are provided to assist the youth in transitioning from FC to independence (US Dept. of HHS, Children's Bureau, 2012). The Chafee Foster Care Independence Program (CFCIP) is a funding resource for independent living programs and training, with no lower age limit requirements, and is available for youth who meet the State's eligibility requirements for CFCIP. However, the requirements at Section 475 of the Act must be met even for those youth who are not eligible for the CFCIP (US Dept. of HHS, Children's Bureau, 2012). In this exploratory evaluation study, three private sector ILS program agencies in the state of Washington participated in the program.

**Online oral health education course**. The goal of oral health education is to improve knowledge, which may lead to adoption of favorable oral health behaviors that contribute to improved oral health (Nakre & Harikiran, 2013). In this exploratory evaluation study, the oral health ILS course was delivered online to participating foster YIT at their respective ILP agency.

**Perception.** Perception is the interpretation of information shaped by personal experience and social frameworks (Rakin, 2015). Therefore, interpretation varies between individuals. In this exploratory evaluation study, the perceptions of YIT were sought about the importance of good oral health and how to prevent dental diseases based upon participation in the online independent life skills oral health course with a post-course evaluation.

**Preventive oral care**. Preventive oral care is the establishment and advancement of effective oral health and function through the prevention or reduction in onset and development of oral disease, deformities, and/or oro-facial deformities (American Dental Association, 2018a).

In this exploratory evaluation study, a dental hygienist provided an oral health independent living skills course for YIT, including the importance of preventive oral care/ dentistry and how to seek it.

**Oral self-care or homecare.** Oral self-care or homecare is "behaviors performed by individuals to achieve, maintain, or promote their own health or oral health" (Darby &Walsh, 2015, p. 397). Perceptions about oral self-care were measured by a post-course evaluation.

**Transition plan.** A transition plan describes an individual's goals as well as the actions and supports required to achieve those goals as the individual transitions out of foster care. Federal law requires that a caseworker, or another appropriate child welfare professional, provide youth with assistance and support in developing a youth-led, personalized transition plan that is as detailed as the youth chooses. Under this requirement, the transition plan must include specific options on housing, health insurance, education, local opportunities for mentors and continuing support services, work force supports and employment services. (U.S. Dept. of Education, 2016). In this exploratory evaluation study, a transition plan is the personalized, *overall* plan that is youth-led, which may or may not include oral health training.

**Youth in transition (YIT).** Youth in transition are emerging into adulthood (emancipating) and included those youth who were currently or formerly in state custody (foster care) or runaways. Depending on which state an adolescent lives, the process of aging out of the foster care system can begin as early as 15 years of age and extend to 21 year olds. During this timeframe, adolescents begin to transition toward adulthood in either independent living arrangements, foster or kinship care, or sometimes, homelessness (National Conference of State Legislatures, 2016). In this exploratory evaluation study, YIT included foster youth between the

ages of 15 to 21 who were currently in the FC system, transitioning through FC, in the process of emancipating, or already emancipated.

## Chapter II: Literature Review

This literature review summarizes information from current literature regarding transition and planning prior to emancipation to adulthood for foster youth. Subtopics explored included: a) dynamics and challenges faced by older youth in transition in a foster care system as they approach emancipation, b) transition planning, c) gaps in transition planning, d) potential impact of oral health life skills training as part of transition planning, and e) applications of the Health Belief Model and Youth Empowerment (Kaplan, Skolnik, & Turnbull, 2009) concept in oral health. Databases searched for this literature review included PubMed, CINAHL, EBSCOhost, Clinical Key, Google Scholar, and the Cochrane Library using combinations of the following search terms: foster children, foster adolescents, youth in transition, emancipation, transition planning, health challenges, care coordination, oral health barriers, medical home, and quantitative studies.

### Challenges Faced by YIT in Foster Care System

The majority of youth in the US have access to psychosocial and financial support systems throughout early adulthood. However, older foster youth and those emancipated from care often face hurdles in developing daily life skills that facilitate the transition to adulthood (Fernandes-Alcantera, 2014; Osgood, Foster, & Courtney, 2010). Reunification with foster youth is a preeminent concern of social welfare agencies. However, Fernandes-Alcantera (2014) and Osgood et al. (2010) have asserted that reunification attempts often are unsuccessful due to poor family dynamics and financial support. Instead, youth live in a state of transience through a combination of state care and homelessness, until they ultimately seek emancipation. Moreover, the latest national report, *The Adoption and Foster Care Analysis and Reporting System*

(AFCAR) showed, in Federal Fiscal Year (FFY) 2015, 9% (*n* = 20,789) of the total number of children in FC (*N* = 427,910) were discharged due to emancipation (US Dept. HHS, 2016a).

**Health and well-being of foster youth at the time of emancipation.** Courtney, Dworsky, Cusick, Havlicek, Perez, and Keller (2007) conducted a landmark longitudinal, prospective study, known as the Midwest Study, following a sample of young people (*N* = 732) from the midwest region as they emancipated out-of-state care to assess overall health in adult transition. The study was conducted through a three-part interview sequence; YIT (*N* = 603) who were 17 years and in FC; participants were re-interviewed at age 19 (*N* = 603); and, again at age 21 (*N* = 591). The reported outcomes compared emancipated youth to a nationally representative sample of 21-year-old peers. Fewer Midwest Study youth participants reported having attained current medical insurance (51%), compared to their peers (76%). Moreover, Medicaid covered 71% of youth participants with insurance, and only 39% reported attaining dental insurance. The majority of their peers attained health coverage through their parents or an employer. An additional 39% of the participants indicated they participated in Independent Living Program services, including health education.

Another challenge YIT face is the potential for abuse. Approximately 10% of children in the US experience maltreatment; of those children; 70% are foster children (Christian & Schwartz, 2011). Further, children/youth are often victims of maltreatment because of poverty, family violence, parental substance abuse and mental health disease(s), unintentional injuries, and neglect. A foster youth subpopulation--the lesbian, gay, bisexual, and transgender group, alternates between homelessness and FC, primarily due to family rejection and social stigma.

This particular segment of YIT is estimated to comprise between 5 to 10% of the total homeless youth population (Child Welfare Information Gateway, 2013b).

The notable seminal study, known as the CDC-Kaiser Permanente Adverse Childhood Experiences (ACE) Study, was a collaborative investigation on childhood abuse and neglect and later-life health and well-being (Felitti et al, 1998; US Dept. HHS, Centers of Disease Control and Prevention [CDC], 2016b). The CDC-Kaiser ACE Study was conducted in two waves, between the years 1995-1997, and included more than adults *(N = 17,337*), making it one of the largest investigations of its kind. Survey Wave I included more than 9,000 participants *(n = 9,508)* and Survey Wave II included more than 8,500 participants *(n = 8,667)*. Survey items were identical in both waves and included questions about demographic information and prevalence of ACE estimates (abuse, household challenges, & neglect).

Results of the logistical regression model indicated there was a collective significant effect. Participants' ACE scores ranged between 0-10, categorized by various adverse experiences; the higher the reported score, the more likely one was to suffer reduced health and well-being in adulthood ($p < .001$). More than half of the respondents reported at least one adverse experience, and one-fourth reported ≥ 2 categories of childhood exposures. Those who had experienced four or more categories of childhood exposure to adverse experiences, when compared to those who had none, had exponentially greater negative health effects. These negative health effects included a four to 12-fold increase in health risks such as alcoholism, drug abuse, depression, and suicide attempts, a two to four-fold increase in smoking, poor self-rated health, ≥ 50 sexual intercourse partners, sexually transmitted disease, and nearly a two-fold increase in physical inactivity and severe obesity. Furthermore, ACEs showed a graded

relationship, or dose-response, to the presence of adult diseases including ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease. The CDC has continuously evaluated adverse childhood experiences by conducting medical assessments through periodic morbidity and mortality data updates.

Bright et al. (2015) studied the association between ACEs and dental health. Their study utilized the 2011-2012 National Survey for Child Health dataset of children 1-17 years with natural teeth. The National Survey for Child Health surveyed parents or guardians *(N = 95,677)* by phone, measuring both dental health and ACE scores. Descriptive statistics identified nearly 25% of children with one ACE, 10% with two ACEs, and 10% with three or more ACEs. Results found an association between ACEs and poor dental health, in particular, when a child has an increased number of ACEs in addition to other social determinants, such as lower socioeconomic status and access to preventive dental health services. When considering ACEs in the medical and dental settings, efforts should focus on prevention, intervention plans, and minimization of dental healthcare disparities (Bright et al., 2015; US Dept. HHS/CDC, 2016b).

**Oral Health of Special Needs Children**

The American Academy of Pediatric Dentistry (AAPD, 2016b) categorizes FC as Children with Special Health Care Needs, signifying they have unique health care needs, that include any physical, developmental, mental, sensory, behavioral, cognitive, or emotional impairment or limiting condition that requires medical management, health care intervention, and/or use of specialized services or programs. Special needs conditions may be congenital, developmental, or acquired through disease, trauma, or an environmental cause and may impose limitations in performing daily living activities and self-care as well as self-maintenance

activities or substantial limitations in a major life activity. Health care for individuals with special needs requires specialized knowledge, as well as increased awareness and attention, adaptation, and accommodative measures beyond those measures that are considered routine (AAPD, 2016b).

The American Academy of Pediatrics (AAP) conducted a population-based study of the progression of children's oral health since the Surgeon General's Report on Oral Health in 2000 was published (Lewis, 2009). Summarized within the study report were pivotal advances in national dental care and oral health surveillance of children with special health care needs (CSHCN). The first phase was known as the 2001 National Survey-Children with Special Health Care Needs. Researchers utilized a validated instrument, called The Children with Special Health Care Needs Screener, to broadly classify children as having a special health care need or not. Parents of CSHCN *(N = 750)* were interviewed throughout the US with a random digit dialing system questionnaire to determine whether their children had a special health care need (Lewis, 2009). These outcome variables focusing on unmet needs were considered: 1) preventive dental care, 2) other dental care, and 3) any dental care. Two survey items about dental care need assessed whether the child needed preventive dental care and whether the child needed other dental care in the previous 12 months.

The second phase was known as the 2006 National Survey-Children with Special Health Care Needs. Within this phase, parents of CSHCN *(n = 40,840)* and parents without CSHCN *(n= 6,113)* completed an interview known as the 2006 National Survey-Children with Special Health Care Needs (Lewis, 2009). Findings indicated a substantially higher proportion of CSHCN had unmet dental care needs ($p < 0.0001$) as compared with children without SHCN.

Moreover, an increase in poverty levels correlated with higher levels of unmet dental needs ($p < 0.0001$). Parents reported 81% of CSHCN needed preventive dental care, and 24% needed other dental care within the past 12 months. Only 8.9% of CSHCN who needed dental care were able to obtain it.

The 2006 CSHCN survey indicated that approximately 9% of CSHCN who needed dental care were unable to obtain it compared to 5% of children without special needs. According to both the 2001 and 2006 CSHCN surveys, dental care attainment was the leading unmet health care need for CSHCN, in 2006, 23% fewer CSHCN participants had unmet dental care needs compared to the 2001 survey results, despite a measurable increase in stated preventive dental care in the later survey (78% in 2001 & 81% in 2006). However, the degree of poverty and severity of conditions indicated considerable disparity in obtaining care. Both the 2001 and 2006 surveys identified a gap in knowledge regarding the root causes of dental care utilization deficits within the CSHCN.

**Dental care for CSHCN.** In a qualitative study, Cruz, Chi, and Huebner (2016) conducted a semi-structured interview with 13 key informants, mainly in administrative roles within community health centers offering dental health services to CSHCN aged 0-5 years and their parents in Spokane County, Washington. Participants were asked about the organization, the types of services provided, and both the barriers and facilitators in accessing services. The study indicated four types of oral health services were commonly offered: screenings, parent education, preventive dental care, and dental referrals. Barriers to services included, lack of resources, administrative and system barriers, low demand from parents (children with competing health needs), politics on fluoride, and the perceived lack of Access to Baby and

Child Dentistry (ABCD) enrolled dentists who could provide services to CSHCN (Cruz et al., 2016). Cruz, Chi, and Huebner (2016) stated that some communities might have two to three local Access to Baby and Child and Dentistry (ABCD) dentists listed that cater to special needs. While this study was relatively small, it offered the potential to expand and explore gaps in care coordination.

Melbye, Huebner, Chi, Hinderberger, and Milgrom (2013) asserted that roughly 60% of FC children have special healthcare needs. In addition, Waldman et al. (2014) discussed the nationally reported unmet dental needs of children with special healthcare needs (CSHCN). According to Waldman et al. (2014), despite Medicaid being a mandatory service for the CSHCN population, 10% of dentists admitted to declining to provide treatment for this segment of the Medicaid population.

Oral health is essential to overall health, and poor oral health can lead to heart disease, diabetes, and problems with pregnancy (Kane, 2017). As social workers are largely responsible for the health and welfare of foster youth, it is important to engage them in assuring that foster youth have an awareness of the importance of oral health and access to oral healthcare (Carrellas, Day, & Cadet, 2017).

Multiple challenges affect the foster care youth population's ability to attain dental care. The limited data available indicate that both foster youth and CSHCN have poor oral health outcomes. Transition planning that includes an oral health education component has the potential to serve as an avenue for improvement,

**Transition Planning and Gaps in the Process**

In 2014, the federal government extended Medicaid coverage for former foster youth until age 26. Youth with particularly traumatic backgrounds or special needs who require a supportive team to assist them in their ILP, transition planning, and access to health and oral care services (Child Welfare Information Gateway, 2013b).

The *2015 Annual Report of Child Welfare System Performance in Washington State*, examined the proportion of YIT who received some sort of transition planning by the age of 17.5 (Partners for Our Children [Annual Report], 2015). According to the report, transition planning meetings were considered new, despite the enactment of the Fostering Connections Act in 2008 requiring that YIT are offered state assistance in the development of a transition plan 90 days prior to aging out of FC custody at age 18 (Child Welfare Information Gateway, 2013a). The percentage of transition planning meetings conducted between YIT and social workers increased from 65% percent in 2012 to 90% in 2014. The report indicated that the gap in transition planning in previous years likely stemmed from a lack of priority by the Washington State Department of Social and Health Service Children's Administration (Partners for Our Children, 2015).

The most challenging, yet critical element of the Fostering Connections Act of 2008 is the provision that each plan should be as detailed as the child may elect (Library of Congress, 2008; Child Welfare Information Gateway, 2013a). Mitchell, Jones, and Renema (2014) led a longitudinal, transformative youth-centered research study in South Carolina titled *Voices and Visions in Transition* to assess the understanding of youth *(N* = 198*)* regarding healthcare service entitled to them. The study included questions from the federally-mandated National Youth in Transition Database (NYTD), in addition to questions specific to South Carolina, which asked

youth about their experiences and perceptions about available independent living program services and the transition out of FC. Between fiscal federal year (FFY) 2010 and 2011, all states were required to collect data from youth in FC at age 17 years, and again at ages 19 and 21. To address the intent for the first round of the NYTD report, the *Voices and Visions Study* tracked the operational performance of States' ILP services and information related to 17-year old foster youths regarding: financial self-sufficiency, educational attainment, connection with adults, homelessness, high-risk behaviors, and access to health insurance (Mitchell et al., 2014; Youth.gov, 2012). One-fifth of the participants ($n$ = 198) reported homelessness; 14% were female and seven percent were male. Moreover, 60% of youth were not aware of their transition plan, or knew whether they played a role in its development. Seventeen percent of youth respondents were involved in their transition plan but did not lead it, while 11% reported leading their plans. The remaining six percent had no involvement in the development of their plan. Sufficient resources, social support, personal habits and skills in YIT as they emancipate play a key role in a successful transition plan. The research supported the need for intentional youth engagement in transition planning starting at the age of 17 (Mitchell et al., 2014).

Similarly, in a cross-sectional self-reported survey, Department of Social Health Services Research and Data Analysis Division analyzed and reported the fiscal federal year 2011 NYTD-reported services in Washington State ($N$ = 1,707) (Sharkova, Mancuso, & Felver, 2012). Older youth were less likely to receive independent living skills services; 58% of the participants receiving independent living skills services were under 18 years old. Twenty-three percent of all foster youth aged 16-21 years ($n$ = 396) reported receiving health education and risk-prevention training; however, there was no mention of oral health training (Sharkova, Mancuso, & Felver,

2012). A follow-up NYTD cross-sectional self-reported survey in FFY 2013 assessed perceptions of Washington foster youth, who had turned 19 ($N$ = 378), regarding their transition to independence (Sharkova, Lucenko, & Felver, 2015). The survey collected data regarding youth participants' education, financial self-sufficiency, experience with homelessness, positive connections with adults, high-risk behavior, and access to health insurance. Thirty-five percent of the youth ($n$ = 128) surveyed thought they were involved in developing an ILS, compared to the findings from the 2011 survey where 47% of participants ($n$ = 193) reported being involved. Moreover, 53% ($n$ = 193) of the respondents indicated that the ILPs adequately addressed their needs in health care education or training. Key findings indicated youth who reported supportive relationships with foster parents and other adults were more likely to experience better life experiences and fewer risk factors overall (Sharkova et al., 2015). The critical element in successful adult transition for foster youth is a stable adult whom the YIT can rely on for support in all areas of life, including caseworkers at independent living services.

In compliance with federal mandates, the Fostering Connections to Success and Increasing Adoption Act of 2008, Title II Improving Outcomes for Foster Children outlined the following sections:

> Sec. 202 requires a case review system to include a procedure for assuring that a caseworker aids and supports a child aging out of foster care in developing a personalized transition plan. Sec. 203 provides for short-term training for child welfare agencies, relative guardians, and court personnel. Phases in increased expenditures for such training. Sec. 204 removes a child's immunizations from the health and education records required as part of a case plan. Requires case plans to include a plan for ensuring

the educational stability of the child while in foster care. Requires the state plan for foster care and adoption assistance to provide assurances that each child who has attained the minimum age for compulsory school attendance under state law, and with respect to whom there is eligibility for a payment under the state plan, is a full-time elementary or secondary school student or has completed secondary school. Sec. 205 requires each state's child welfare services plan to develop a plan for the ongoing oversight and coordination of health care services for any child in a foster care placement (Library of Congress, 2008).

**Potential Impact of an Oral Health Life Skills Training Intervention**

Christian and Schwarz (2011) discussed the importance of a shared interdisciplinary community responsibility for foster children between child welfare, healthcare providers, educators, and biological and foster families. Due to high prevalence of maltreatment and complex health needs, these authors emphasized the need to establish a medical home and the provision of ongoing health education for youth. In a retrospective cohort study, Chi (2013), studied youth ($N$ = 1,746) with special health care needs (YSHCN). Data from the 2001 National Survey of CSHN and the 2007 Survey of Adult Transition and Health were analyzed for comparison. Youth with special health care needs who had a medical care transition plan experienced a nine percent greater 9% greater relative risk of utilizing dental care than YSHCN without a medical care transition plan. Moreover, 63% YSHCN had a medical care transition plan; and 73.5 % utilized dental care. A significant association with dental care use was made when a medical transition plan was established; however, only for YSHCN with no functional

limitation. Chi (2013) concluded routine dental care should be a component of the overall healthcare transition planning process for all YSHCN.

## Applications of Theoretical Models to Oral Health of Foster Youth

**The Health Belief Model in oral health.** The Health Belief Model (HBM) is a staged behavioral theory commonly used within health education, utilized to describe an individual's health behaviors (Rosenstock, 1974). The six stages of the model include, 1) Perceived susceptibility- the perception of the chance of contracting an illness, 2) Perceived severity- feelings concerning the seriousness of contracting an illness, 3) Perceived benefits- the beliefs related to effectiveness of taking action, 4) Perceived barriers, the beliefs concerning the negative consequences of taking an action, 5) Cue to action- the factors that activate or remind an individual about his/her readiness to change, and 6) Self-efficacy- the level of confidence an individual possesses in taking an action. Foundationally, an individual must desire to change or prevent a perceived threat or condition and in turn believe a subsequent health behavior will elicit change (Rosenstock, 1974).

Dodd, Logan, Brown Calderon, and Catalanotto (2014) conducted semi-structured interviews with *(N = 100)* rural, minority adolescents, ranging between 12 to 18 years, in a northern Florida area with low socioeconomic status about their perceptions of oral health and dental care. When interviewed about oral health and disease, 35% respondents reported not having a regular dentist. When they inquired about the benefit of regular preventive care, the majority of respondents cited esthetic benefits as a response. Finances, transportation, Medicaid usage, parental availability, and fear (60%) were commonly reported adversities related to seeking dental care (Dodd et al., 2014). Dodd et al. (2014) stated, "These findings point to a

critical balance between knowledge, threat, efficacy, and cost that must be reached if oral healthcare access, and individual oral health, is to improve" (p. 809). Dodd et al. concluded educational and preventive interventions and policies should focus on rural adolescents' complex needs and burdens.

Emancipated youth participants *(N = 28)* between ages of 18-27 years, with a history of mental health needs and previous service use, were recruited in 2010 using focus group, purposive sampling from a single community center in north Texas (Sakai, Mackie, Shetgiri, Franzen, Partap, Flores, & Leslie, 2014). Researchers designed the sample by utilizing the Health Belief Model with the following domains: youth perceptions of the threat of mental health problems, treatment benefits versus barriers to accessing mental health services, self-efficacy, and cues to action. A modified grounded-theory approach was used (Sakai et al., 2014). Youth identified limited self-efficacy and insufficient psychosocial supports which would cue them to action during transition from FC. Further, participants' perceived their mental health services were impacted by their mental health needs, self-efficacy, psychosocial supports during transition, and barriers to access after emancipation (Sakai et al., 2014).

Youth aging out of FC have inordinately higher levels of mental health problems compared with youth in the general population. Implementation of the Health Belief Model is an appropriate approach when considering the level at which the patient may be performing and modify accordingly.

**Youth empowerment in oral health**. Youth empowerment has become a more commonly utilized conceptual framework over the past 15 years; however, it is somewhat poorly understood (Martínez, Jiménez-Morales, Masó & Bernet, 2016). Conceptual frameworks can

determine success in program planning and program evaluation, and can further advance research to evaluate innovative intervention planning (Kaplan et. al, 2009). In a broad sense, youth empowerment is the design of youth development and resilience (Moody, Childs, & Sepples, 2003). Kaplan et al. (2009) asserted the main dimensions associated with youth empowerment are identified as, a) growth and well-being, b) relational, c) educational, d) political, e) transformative, and d) emancipative. Empowerment encompasses both a vital process and an outcome for FC youth.

Kaplan et al. (2009) reviewed empirical literature between 1997-2009, searching the Medline and Pub Med databases, in addition to multiple government, foundation, and organization child welfare websites related to empowerment of youth in FC. Findings within the literature indicated positive results from programs focused on mentoring strategies. Mentoring program goals often include a) improving mentees' independent living, social skills, and academic functioning, b) increasing positive links to the community, c) facilitating links to social services, and d) reducing juvenile crime and substance abuse. Implementation of mentorship earlier in life, during ages five to ten years, markedly improved outcomes compared to starting mentorship in adolescence. Similarly, naturally occurring relationships, such as high school mentors, also proved to facilitate an overall positive effect.

**Conclusion**

This literature review summarized the available services to assist YIT with transition plans, gaps in medical and dental care coordination within the YIT population, and the challenges YIT patients with special needs may face. The majority of YIT come from traumatic backgrounds and consequently experience a myriad of challenges, including special health

needs. Further, overseeing the development of a transition plan is a complicated process at a young age, especially for those youth who are vulnerable with multiple needs. Emancipated youth are also at risk for many negative outcomes after transition from foster care to independent living in adulthood, including poor educational attainment, unemployment, early pregnancy, and homelessness, which might further exacerbate existing mental health problems. Research indicates that a supportive adult in a youth's life, especially while they are contending with critical transitory life skills and decisions, enhances a successful emancipation process. A dental hygienist could play an integral role as an interdisciplinary health care team member by providing ILS training. Routine dental care should be part of overall transition planning, especially when youth demonstrate special health care needs. Dental professionals are important members of the comprehensive healthcare coordinating team, including a YIT's physician, social welfare team, caregiver(s), and any other specialists in the establishment of a smooth transition to a dental home. In order to help patients, dental professionals must understand a patient's psychosocial level and motivation. The utilization of specific health models, such as the Health Behavior Model, can assist dental professionals in gaining a deeper understanding of patients' motivation. Furthermore, when working with vulnerable populations, such as FC youth, the HBM can transcend across many health disciplines.

# Chapter III: Methodology

## Overview of Project

The purpose of this exploratory evaluation project was to address the need for oral health education for YIT by developing and presenting an online ILS oral health education program, collecting pilot data to examine the perceptions of YIT and caseworkers regarding an oral care education program designed for YIT, and proposing a potential solution to address barriers associated with the implementation of this oral health care education program.

## Research Questions

This exploratory evaluation project was guided by the following questions:

1. What aspects of the online independent living skills oral health course do the foster youth participants approaching emancipation perceive were beneficial to them in relation to their own oral health in the future?
2. What aspects of the online independent living skills oral health course do the foster youth participants approaching emancipation perceive need improvement to address their own oral health in the future?
3. What aspects of the online independent living skills oral health course do the facilitating caseworkers perceive were beneficial to participating foster youth as they prepare for emancipation?
4. What aspects of the online independent living skills oral health course do the facilitating caseworkers perceive need improvement to address the oral health needs of foster youth approaching emancipation in the future?

5. What content should be included in a model independent living skills oral health educational program for foster youth approaching emancipation?
6. What challenges must be addressed to implement an online oral health education program where a dental hygienist provides an oral health independent living skills educational intervention class for YIT and a caseworker?

**Outcome Measures**

This exploratory evaluation explored a potential solution to address the need for oral health education for YIT. The exploratory study was used to assess the participants' and the facilitating caseworkers' perceptions of the online oral health ILS course for emancipating foster youth to present a potential solution for implementation and testing of a future oral health living skills course. This project explored the aspects of the online ILS course to improve ease of access and facilitation of the course for caseworkers. The project further explored the challenges and barriers a dental hygienist or caseworker may encounter when providing an online oral health ILS course for YIT as part of their overall transition plan prior to emancipation. Pilot data were collected using a post-course evaluation, including closed and open-ended items, to explore perceptions of a small group of YIT participants and the caseworkers facilitating their ILS coursework.

**Research Design**

This exploratory evaluation project was designed to develop and present an online ILS oral health program for YIT, collect pilot data to assess participants and facilitating case workers perceptions of the program, and identify barriers to implementation by a dental hygienist working with private sector ILS programs.

**Description of the Setting**

The principle investigator requested approval from Youthnet's Independent Living and Transitional Services Program Director to conduct the project and offer an oral health ILS course (Appendix A). The online ILS oral health course for Youthnet participants was offered for YIT living in counties adjacent to and including Whatcom County, Washington. Caseworkers and participants living in Whatcom, Skagit, Island, Snohomish, and San Juan met one-on-one for the same facilitated training used in the pilot program to complete post-course evaluations at a predetermined location, decided by discretion between the participants' social worker and caseworker. These locations were routinely set in public places, such as coffee shops, for accessibility and convenience for YIT training courses and meetings with designated caseworkers. A laptop or tablet computing device was used for the presentation of the oral health education course, and a cell phone was available for consultation with the principle investigator as needed.

In an attempt to recruit more participants, the principle investigator contacted additional ILP agencies. Olive Crest, an agency that serves at-risk youth and families in California, Nevada, Oregon, and Washington State, agreed to participate in the pilot testing of the online oral health course for YIT. Olive Crest offers an ILS program for YIT in Kitsap, WA. The principle investigator requested approval to offer the oral health education course and conduct the evaluation project from Olive Crest's Independent Living Skills Program director (Appendix B). The online ILS oral health course was offered at the West Sound Olive Crest agency in Kitsap to YIT participants in a classroom with a computer lab, equipped with seven desktop computers within individual cubicle spaces, and chairs for YIT use. Olive Crest caseworkers

were asked to offer the ILS oral health course one-on-one. The principle investigator was available by phone or email for consultation as needed.

YouthCare, a transitional living program that also offers youth Independent Living Program services to foster youth in Seattle, WA, agreed to offer the oral health education session online. The principle investigator requested approval to offer the oral health education session and complete the exploratory evaluation to YouthCare's Independent Living Skills Program Director (Appendix C). The online ILS oral health course was offered at the YouthCare facility in Seattle to YIT participants in a classroom, equipped with five desktop computers and additional laptops and chairs for YIT use.

**Research Participants**

**Sample Description.** A non-probability convenience sample of YIT (N = 13) participants from Youthnet, Olive Crest, and YouthCare were recruited for this oral health course at the corresponding facilities and/or other locations. Participants were YIT (formerly or currently in FC or homeless youth) between the ages of 15-21, about to be emancipated.

All participating agencies allow youth participants to select ILS classes in topics of their choice to reach their individual goals. However, caseworkers worked individually with their clients to develop an independent plan and suggest courses that would be beneficial to each individual client.

**Sample Inclusion/exclusion criteria.** The following criteria were used for inclusion in the:

- Foster youth, formerly or currently in any type of care (kinship, traditional FC, group home, independent/ transitional living in state care, etc.)

- YIT, between the ages of 15-21 years, seeking emancipation
- Runaway youth seeking emancipation (whether in state or custodial parent care).

The following are the exclusion criteria:

- Had completed ILS/ transition classes

**Informed Consent**

The supporting institution's Human Subjects Committee indicated this exploratory evaluation project was exempt from its review. Participants from Youthnet, Olive Crest, and YouthCare were each provided the same course invitation letter, informing them that the course was related to an exploratory evaluation project. General information regarding the participants' right to decline participation in the course was provided (Appendix D). All three agencies had their own standard protocol involving both obtaining consent when the participant arrived to class. The principle investigator was available by phone to answer questions prior to obtaining informed consent.

Youthnet pilot group participants *(N =8)* were the only group that were initially required to log into the supporting institution's Community Moodle Learning Management System (Community Moodle LMS) to complete the course and the post-course questionnaire. Subsequently, the course was migrated to a Google site. This change was made in response to requests from facilitating caseworkers to improve ease of access to the online course. Embedded YouTube videos were blocked in the computer lab. The main issues with the initial method were the complexity and time spent creating a Community Moodle LMS log in. Some students were forced to create an email account or request credentials for an email account that they used infrequently. Youthnet caseworkers were sent email instructions on how to navigate the new

Google site, supported by a phone call from the principle investigator. No changes in the program and included content occurred with the migration.

The participants' confidentiality was protected while using the Community Moodle LMS and post-course evaluations did not require YIT participants to include their names. Further, the post-course evaluations were developed using the anonymous setting in the Community Moodle LMS. During data collection, data were stored in the Community Moodle LMS.

The Community Moodle LMS course was later migrated to a Google website for ease of use. All three participating agencies facilitated the course using the Google site. Confidentiality was maintained for both the course and post-course evaluations. Community Moodle LMS data collected were password protected and available thesis committee members. The Google site data collected were stored in the Google site cloud, only retrieved by thesis committee members.

For summary, data were downloaded from the Community Moodle LMS and the Google site to a password protected computer, and coded and stored with no personally identifiable information. At the conclusion of the project, data were stored electronically in Box, a secure, centralized, and cloud-native content service, by Jacque Freudenthal, co-major thesis advisor, and will be retained for a period of seven years as required by the supporting institution.

**Data Collection / Participant Completion**

**Procedure/ Protocol.** The principle investigator obtained agreement to conduct the project from the director of the Youthnet facility, the Youthnet Adolescent Services Supervisor. The corresponding agency caseworkers promoted the oral health education session to social workers working with the YIT and foster parents with an emailed digital flyer created by the PI beginning three to four weeks before the commencement of the classes (Appendix E).

The Community Moodle LMS course enrollment and navigation instructions were sent electronically to all three caseworkers for review by the principle investigator (Appendix F). Once caseworkers created an online account, course materials (Appendix G) could be accessed on the Community Moodle LMS. These materials included Washington State Department of Health's *Tooth Tutor's* (Washington State Department of Health Oral Health Program *Tooth Tutor*, 2011) online pre-k through 12 curriculum, the post-course program evaluation for youth, the post-course evaluation for caseworkers, and American Dental Association's Mouth Healthy videos on proper flossing and tooth brushing (ADA, 2018b). The principle investigator provided group training for all three Youthnet caseworkers in person on January 31, 2018, followed by a small pilot test of the online ILS course with YIT. This training session was held in the high school computer lab used by Youthnet. The principle investigator answered any question(s) regarding: a) Community Moodle LMS training, b) informed consent/assent processes, c) facilitator roles, d) duration of independent living skills participant facilitation, e) paper and pencil or online testing accommodations, and f) equipment needed. The principle investigator discussed the scheduling of presentations and her availability for questions and answers during their facilitation of all YIT courses presented.

The principle investigator pilot tested the online oral health ILS course with a small test group of Youthnet caseworkers (N=3) and YIT participants (N=8) living in Skagit and Whatcom County. The group pretested an ILS oral health online course facilitated by the caseworkers and the principle investigator at the Youthnet facility in Mount Vernon, Washington. The facility shares a space with an alternative high school. The participants met in the computer lab within

the high school to complete the ILS course. The computer lab had ten desktop computers within individual cubicle spaces, and chairs for YIT use.

The online YIT oral health education course consisted of the following:

- Participants had a chance to ask the caseworker any questions before proceeding.
- The caseworker provided brief verbal instructions for using the online program. The principle investigator embedded a tutorial in the Community Moodle LMS with instructions on how to proceed with the online course and complete the post-course program evaluation.
- The caseworker facilitated the program on the selected device. Participants obtained help from the caseworker to navigate the course as needed.
- At the conclusion of the online course, the project participant completed the online post-course program evaluation without influence from the caseworker. Participants who preferred a hard copy and pencil would have been offered one if any had needed or requested one.

Permission to use all educational content for the YIT oral health education courses was obtained from the Washington State Department of Health (Appendix H), including oral health curriculum materials (http://here.doh.wa.gov/materials/tooth-tutor/15_ToothTutor_E11L.pdf)., *Tooth Tutor, A Simplified Oral Health Curriculum for Pre-K to Grade 12* and American Dental Association (Appendix G). Topics related to these materials included, a) the importance of a healthy smile, b) an overview of dental disease and its recognition, c) prevention of dental diseases via healthy eating habits, d) oral self-care techniques, e) how to find a dental home, and f) dental emergencies. The total time for delivery of the online course and post-course program

evaluation was approximately 30 minutes, depending on each individual participant's unique learning needs.

Initial feedback from pilot test Youthnet YIT (N = 3) and caseworker participants indicated the course was difficult to navigate because Community Moodle LMS required account creation. Youth participants were challenged by the necessity of retrieving email passwords. Most of the youth participants had problems recalling recently created credentials. The course was subsequently migrated to a Google website for ease of use.

The caseworker informed YIT participants that special accommodations were available, such as a paper and pencil evaluation system or the use of an online form. Upon completion of each educational session, caseworkers optionally completed their own post-course program evaluation using a paper and pencil form as requested by the caseworkers.

Participants from Olive Crest and YouthCare received essentially the same invitation letter (Appendix D) and flyer (Appendix E) as was issued to Youthnet participants, though each form was slightly modified to meet the particular agency's needs.

**Instruments.** Two investigator designed, post-course evaluations were provided to the project participants (Appendix I) and the caseworkers (Appendix J) for completion at the conclusion of the course. Content validity was determined by a panel of content experts before pretesting and implementation of the project (please see the validity description provided below (p. 34) for more detail regarding the establishment of content validity).

The post-course program evaluations assessed program content, perceptions of YIT and caseworkers regarding benefits and needed improvements in the online ILS oral health course, and whether or not the participants perceived the online program as useful. The caseworkers

were invited to complete an evaluation, regarding their perceptions of the ILS online oral health course and the challenges that needed to be addressed to enhance implementation and ease of access and use of the online oral health education program, including open-ended items to assess their perceptions of the participants' interest in the content.

Current or past foster care status of the participants was assessed in the questionnaire. The participants' instrument consisted of 13 items designed to assess participants' perceptions utilizing Likert-scale response options ranging from one to five, with five indicating strongly agree and one indicating strongly disagree. Questions one and two assessed the adequacy of the training location and time provided. Questions three through five assessed the overall relevancy and content of the program and the ease of use of the online program. Questions six through eleven assessed participants' perception of understanding of the following topics: a) importance of general oral health, b) benefit of early dental disease recognition, c) benefit of healthy eating habits in relation to dental disease prevention, d) toothbrush and floss technique, e) dental home location upon emancipation, and f) dental emergency protocol. The remaining two questionnaire items utilized open-ended questions regarding the participants' perception of those aspects of the online training that were beneficial.

The caseworker post-course evaluation was designed to assess the adequacy of caseworker training, adequate participant time to complete the course, and clarity of objectives. Questions four through five assessed the ease of facilitating the online oral health ILS course and course topic relevancy. Caseworkers were asked to rate the participants' interest in the addressed six topics in question six. Caseworkers were also asked to rate the same topics in terms of level of difficulty in question seven. The remaining three open-ended items assessed

the caseworkers' perception of the most helpful and least helpful aspects of the course, as well as those aspects, if any, of the course that could be implemented within an emancipating youth's independent living skills program.

**Validity.** Content validity was determined for both post-course evaluation instruments using a panel of five experts with relevant background experience related to content development for adolescents. These experts reviewed the self-designed post-evaluation instruments to determine the content validity of the two program evaluation instruments prior to the commencement of the course. E-mails (Appendix K) were sent to the panel of experts requesting a review of the post-course program evaluation and a determination of content validity of the evaluation instrument. Selected panel members included: Barbara Hammaker, RDH, BASDH; MHS; Scott Howell, DMD, MPH; Merri Jones, RDH, MSDH; Jill Mason, MPH, RDH, EPP; Jill Schultz, RDH, MEd; and Meg Zayan, RDH, BS, MPH. The panel reviewed and provided suggestions to revise the instruments as needed, to establish an overall relevance to the research questions and purpose of the study. The reviewers rated the overall relevancy of the instruments and subsequently suggested minor revisions with both instruments, resulting in brevity. All of the reviewers' suggestions were incorporated and content validity was established prior to the program pretest and initial course launch for data collection.

## Limitations

Limitations of this exploratory evaluation study project included varying levels of neurocognitive disabilities or other special needs within the sample population. This exploratory program evaluation was further limited by the utilization of a small, non-probability sample. This limitation preludes the findings beyond this sample. Results were used to determine the

feasibility of an online YIT educational program, to collect pilot data to explore perceptions of YIT and caseworker participants, to develop a model online ILS oral health program for future replication and evaluation. Moreover, participants may have varied educational experiences due to different caseworkers facilitating the online oral health program at various discretionary locations throughout five counties.

**Statistical Analysis**

Descriptive statistics and percentages were used to summarize and describe the data.

**Manuscript Submission**

A manuscript entitled, A Model Online Oral Health Education Course for Foster Youth in Transition, will be submitted for publication to *Adoption and Fostering* to report results, discussion, and conclusions in lieu of the traditional thesis Chapters IV and V. This manuscript has been developed according to the author guidelines (Appendix L). The manuscript discussing the issue of no oral health education for YIT as a part of the issue of no oral health education for YIT as a part of the ILS training offered prior to emancipation, the reasons this course is critical to overall health, and the resultant proposed model online ILS course follows.

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**Manuscript**

# A Model Online Oral Health Education Course for Foster Youth in Transition

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**Abstract**

Foster youth face multiple barriers to attaining health care services as they transition to emancipation for a myriad of reasons. As a result, in the United States, many foster youth contend with significant health problems, including oral health issues. Untreated dental disease affects overall health and the ability to eat, sleep, and function at home and at school. As youth are emancipating, many participate in an independent living skills (ILS) program, comprised of living skills classes that educate and prepare youth to function independently and transition to adulthood. Classes regarding health are often part of ILS programs' curriculum; however, classes on preventing and maintaining oral health are not offered. The authors developed and presented a model online ILS oral health education program for youth in transition (YIT). The project explored the perceptions of YIT and caseworkers regarding the online oral health ILS course, and revisions were made to improve its accessibility and usability. Initial evaluation indicates a consensus among YIT participants and caseworkers that the model course was informative. The authors propose this model online oral health ILS program for YIT to address the need for oral health education and barriers associated with implementation. Widespread use and evaluation is recommended.

**Keywords**

Foster youth; Foster care; Foster home care; Oral health; Transition

## Introduction

The majority of youth in the US have access to psychosocial and financial support systems throughout early adulthood; however, older foster youth and those emancipated from foster care often face hurdles in developing daily life skills that facilitate the transition to adulthood (Fernandes-Alcantera, 2014). Although independent living skills (ILS) courses are available to youth in transition in the US, oral health education is not offered as a part of these courses. Oral health is essential to overall health, and poor oral health can lead to heart disease, diabetes, and problems with pregnancy (Kane, 2017). As social workers are largely responsible for the health and welfare of foster youth, it is important to engage them in assuring that foster youth have an awareness of the importance of oral health and access to oral healthcare (Carrellas, Day, & Cadet, 2017).

### *Challenges and Barriers in Attaining Oral Healthcare for Foster Youth*

Research shows an upward trend in children accessing dental services nationally; whereas, vulnerable children living in poverty with medically and developmentally compromised needs experience a gap in dental services (Waldman, Ackerman, & Perlman, 2014). This exploratory project also indicated the same vulnerable subpopulation of children continues to face difficulties accessing services in early adulthood.

Dental caries, also known as tooth decay, is the most common chronic disease of children aged six to nineteen, and it is often preventable (United States Department of Health and Human Services, Centers for Disease Control and Prevention, 2016). Foster youth encounter multiple barriers in receiving regular dental care including preventive oral health services. Barriers to dental care include a low number of dentists accepting Medicaid, children moving from one

foster home to another, competing health needs and priorities, poor record keeping, and social workers lacking resources (Melbye, Huebner, Chi, Hinderberger, & Milgrom, 2013; Carellas, Day, & Cadet, 2017). Landmark studies have indicated approximately 67% of children in foster care did not utilize dental care; furthermore, only 39% of emancipated youth (aged 21 and over) reported attaining dental insurance (Melbye, Huebner, Chi, et al., 2013; Courtney, Dworsky, Cusick, Havlicek, Perez, & Keller, 2007). The inability of children/youth to access dental care in the US contributes to a decrease in overall health, missed school, and needless dental pain.

Urgent and often unfulfilled overall health needs of children and adolescents in foster care, including "medical, mental health, developmental, oral health, and psychosocial" needs, are often precipitated by traumatic events and exacerbated by the barriers in attaining health care services within the foster care system (Szilagyi, Rosen, Rubin, & Zlotnik, 2015, 1146). The higher incidence of health care issues of foster children and youth necessitating specialized services or management influenced the American Academy of Pediatrics (AAP) to categorize foster children with special health care needs (CSHCN) (Szilagyi, Rosen, Rubin, et al., 2015). Foster children comprise an estimated 60% of the CSHCN population (Melbye, Huebner, Chi, et al., 2013).

In the US, Medicaid is a joint federal-state program that provides health care coverage for low-income individuals. However, not all dentists are Medicaid providers. Despite Medicaid being a mandatory service for the CSHCN population, 10% of dentists have declined to provide treatment for this segment of the Medicaid population (Waldman, Ackerman, & Perlman, 2014). In fact, parents have reported 81% of CSHCN needed preventive dental care, and over 20% had

other unmet dental needs (Lewis, 2009). The inclusion of oral health education in transition planning might have the potential to serve as an avenue for improvement.

### *Transition Planning and Gaps in the Process*

A transition plan describes an individual's goals, as well as the actions and support systems required to achieve those goals as they emancipate from FC. Under federal guidelines in the US, the plan must include "specific options on housing, health insurance, education, local opportunities for mentors and continuing support services, workforce supports, and employment services" (United States Department of Education, 2016, p. 6).

The American Academy of Pediatric Dentistry (AAPD) has recognized the difficulties of transitioning patients with SHCN to a dental home and has recommended an up-to-date detailed written transition plan be developed for oral health in collaboration with adolescents and their families (American Academy of Pediatric Dentistry, 2016a; American Academy of Pediatric Dentistry, 2016b).

In 2014, the federal government extended Medicaid coverage for former foster youth until age 26. To maximize this coverage, youth with special needs or particularly traumatic backgrounds need a supportive team assisting them in their ILP, transition planning, and access to health and oral care services (Child Welfare Information Gateway, 2013).

Christian and Schwarz (2011) discussed the importance of a shared interdisciplinary community responsibility to the foster child between child welfare, healthcare providers, educators, and biological and foster families. Due to a high prevalence of maltreatment and complex health needs, there is a need to establish a medical home and the provision of ongoing health education

for youth. Further, a significant association with dental care utilization was made when a medical transition plan was established for youth with SHCN (Chi, 2013).

## Model Online ILS Oral Health Program

This project was designed to address the need for oral health education for YIT by developing and presenting an online independent living skills (ILS) oral health education program, exploring the perceptions of YIT and caseworkers regarding an oral care education program designed for YIT, and proposing a potential solution to address barriers associated with the implementation of this oral health care education program.

The project was guided by the following questions:

1. What aspects of the online independent living skills oral health course do the foster youth participants approaching emancipation perceive as beneficial to them in relation to oral health needs of participants in the future?
2. What aspects of the online independent living skills oral health course do the foster youth participants approaching emancipation perceive need improvement to address oral health needs of participants in the future?
3. What content should be included in a model independent living skills oral health educational program for foster youth approaching emancipation?
4. What challenges must be addressed to implement an online oral health ILS education program?

### *Framework of the Model*

### *Rationale*

Simple and relatively inexpensive preventive oral health measures such as education on oral hygiene practices and diet, use of fluoride, self-compliance, early screening and appropriate interventions may prevent, or decrease, the high burden of oral diseases such as dental caries and periodontal (gum) diseases. Experience and the literature review indicated issues with poor oral health, a lack of access to oral healthcare, and a dearth of related resources for social workers working with foster youth. This model online ILS oral health course was developed by a licensed dental hygienist with experience as a volunteer with foster youth. The goal was to provide a potential solution to the absence of oral health education for YIT and to address potential barriers associated with program implementation.

Content (https://sites.google.com/isu.edu/healthymouth/home) for the oral health online course was used with permission of the Washington State Health Department's oral health program, entitled *Tooth tutor: A simplified oral health curriculum for pre-k to grade 12* (Washington State Department of Health Oral Health Program, 2011), sections designed for middle school and high school students. American Dental Association' *Mouth Healthy* videos were used with permission, demonstrating proper toothbrushing and flossing techniques as well as what to expect with wisdom teeth removal (American Dental Association [ADA], 2018).

### *The Online ILS Oral Health Program Model Framework*

The online ILS oral health program model was structured based on the following goals.

1. ***The importance of a healthy smile***

   The goal of Independent Living Programs is to prepare foster and former foster youth to live independently by increasing their skills, knowledge, and competency in various areas, including daily living skills, such as health goals. The healthy mouth topic was

stressed as it aids in speech, eating, and drinking. Overall health and self-esteem also are related to oral health.

2. ***The overview of dental diseases***

   Tooth decay is the most common, preventable disease in children and adolescents. Moreover, while dental diseases are present, they are often ignored due to poverty or lack of education.

3. ***The prevention of dental diseases via a healthy diet***

   Well-balanced meals and limiting the consumption of sugars in the diet can aid in the prevention of dental diseases. Many foods have hidden sources of sugar. This course provided nutritional education that could aid in changing harmful habits leading to dental disease.

4. ***Oral self-care techniques***

   Proper toothbrushing with fluoridated toothpaste and flossing self-care techniques are paramount in the prevention of dental decay. The selection of oral self-care products can be overwhelming. This program offered participants information to assist them in shopping for individualized products. Supplementary videos enhanced this section (ADA, 2017). Participants were also given donated oral health products at the end of the program.

5. ***How to find a dentist***

   Oral health often is disrupted for YIT due to movement within the foster care system. This program highlighted ways to navigate the Medicaid website in locating dental offices who provide services for eligible foster (or former) youth.

***6. What to do in a dental emergency***

The prevention and protocol of dental emergencies was covered in this course including tooth displacement, fracture, injury, or toothache. An informative video supplemented this section regarding what to expect with wisdom teeth extractions (ADA, 2017).

## Methodology

Following course and survey development, the online oral health course was pretested prior to implementation. A YIT group (N=8) facilitated by a dental hygienist educator and caseworkers from one agency (N=3) completed the course and post-course evaluations with face-to-face assistance of the educator. Subsequently, the online course platform was revised for easier access as participants had difficulty remembering their passwords and accessing the platform based in an education institution. They also had difficulty accessing YouTube to view the videos supporting the instructional content. The decision was made to migrate the course to a more user-friendly platform (Google Site). The caseworker survey was streamlined and items were grouped for ease of responses to address the time restraints of the facilitating caseworkers.

For initial program evaluation, two self-designed, post-course evaluations were provided to the YIT participants (N = 13) and the facilitating caseworkers (N = 8), respectively, at the conclusion of the course. The post-course program evaluations used closed and open-ended items to explore YIT participants and caseworkers perceptions of program content, benefits, and needed improvements in the online ILS oral health course. Content validity was determined by a panel of oral health experts with public health experience related to the foster youth population using a content validity index. Experts rated all items 4.0 on a scale of 1.0 to 4.0 out of 4 for

clarity and relevance, with the exception of two items, suggesting minor wording changes in the open-ended items.

Three private sector independent life skills program agencies in the state of Washington participated in the program. A total of eight caseworkers from the three participating agencies facilitated the course, with four caseworkers facilitating it more than one time. Those caseworkers were invited to complete post-course evaluations. A few Youthnet participants *(n = 3)* utilized the Community Moodle LMS program, but the majority (*n = 6*) used the Google site. Olive Crest participants *(N = 3)*, YouthCare *(N = 2)* participants, and their caseworkers *(N = 5)* utilized the Google site. Exploratory findings from the participating agencies are described below.

**Results**

**YIT Demographics *(Appendix M, Table 1).***

Youth participants *(N = 13)* from all private sector agencies completed a post-course evaluation upon completion of the online course. The mean age of the participants was 16.8 years; the median age was 17 years. Demographic data indicated eight (61.5%) of all YIT participants identified as males and five (38.5%) identified as females.

Six (61.5%) participants indicated they were in some sort of foster or kinship care, with only two (15.4%) actively seeking emancipation. None of the participants identified as being a runaway nor did any request special accommodations for the online ILS oral health course.

**YIT Participants' views on the model online oral health education program *(Appendix N, Table 2).***

***The location where the online course was facilitated was satisfactory.*** Upon evaluation, the participants strongly agreed/agreed (92.3 %); one reported a neutral response regarding the adequacy of the location where the online course was facilitated (one-on-one) was satisfactory. The majority (77%) of the YIT participated in the online course at their respective private sector ILS program agencies, while the remaining youth (23%) participated in the course in coffee shops.

***Participants had adequate time to complete the online course.*** Participants strongly agreed/agreed (100%) they had ample time to complete the online oral health ILS course; one reported a neutral response regarding being satisfied with the allotted time to complete the course.

***Participants navigated the course with few or no difficulties.*** Participants strongly agreed/agreed (92.3%) they had ample time to complete the online oral health ILS course; one reported a neutral response regarding the satisfaction in navigating the course.

***The topics addressed in the course were relevant to them***. YIT participants strongly agreed/ agreed (84.6%) that the topics in the course were relevant to them; two reported a neutral response (15.4%) regarding how relevant course topics were to them.

**Participants' viewed the content of the model program as appropriate and helpful.**

1. *The importance of a healthy smile.* Upon evaluation, YIT participants strongly agreed/agreed (84.6%) that the content regarding the importance of a healthy smile was appropriate and helpful; two participants responded neutral regarding their perception of the importance of a healthy smile after completing the online course.

2. *The overview of dental diseases.* All YIT participants strongly agreed/agreed (100%) they were more aware of the benefits of early recognition of dental diseases.
3. *The prevention of dental diseases via a healthy diet.* After completion of the course, all participants strongly agreed/agreed (100%) they understood more about the connection between healthy eating habits and dental disease prevention.
4. *Oral self-care techniques.* After completion of the course, all participants strongly agreed/agreed (100%) they were more informed about improving their toothbrush and flossing techniques.
5. *How to find a dentist.* After completion of the course, all participants strongly agreed/agreed (100%) the course offered satisfactory information regarding finding a dental office once emancipated.
6. *What to do in a dental emergency.* After completion of the course, all participants strongly agreed/agreed (100%) the course offered useful information about the prevention and protocol of dental emergencies.

Open-ended survey items asked what the participants perceived was most helpful about the online oral health course. While not all participants responded to this section; the majority of those who did perceived the oral self-care instructions were most helpful. A few YIT participants commented that everything presented was good information; in particular, instructions on how to find dental providers who accept Medicaid in addition to how to handle a dental emergency. When YIT participants were asked what they perceived was the least helpful about the online oral health course, most responded "nothing."

**Caseworkers' perceptions**

Three caseworkers that facilitated the course multiple times were asked to complete a questionnaire including open-ended items regarding their perceptions of challenges that needed to be addressed to enhance course implementation, ease of access, use of the online oral health education program, and to explain their perceptions of each of the participants' interest in the content assessed their perceptions. Each of these facilitating caseworkers completed one post-course evaluation. They unanimously agreed that time was a major obstacle to completing the evaluations as all agencies were short of staff and recruiting new caseworkers. As such, participating caseworkers reported having time to complete only one evaluation of the online oral health ILS course rather than one per participant facilitation. The responses strongly indicated the online ILS oral health program, all of the course topics, and educational content were appropriate for YIT participants. Furthermore, the caseworkers perceived their training beforehand was satisfactory to facilitate the course, despite being burdened with time constraints and competing foster youth goals. However, obtaining only three caseworker responses does not provide an adequate assessment.

**Discussion**

This exploratory evaluation of the model oral health project demonstrated that YIT and caseworker participants had positive impressions of the course. They perceived the content outlined within the model framework and delivery of an online oral health ILS program was satisfactory and informative. The most significant limitations associated with this pilot program included a small sample size of YIT participants affected by other challenges associated with foster care and few post-course evaluation responses from caseworkers impacted by excessive work demands. However, all respondents were in agreement that the course was helpful and

relevant; access was easy; and, few suggestions were made for improvement. The program was adjusted based on initial evaluation during the pretesting, and the model course as developed can be replicated on a larger scale.

Existing ILS programs do not offer oral health-related courses for emancipating youth. A need for oral health education for foster youth has been documented, and participants all perceived the program content as relevant and helpful. The migration of course content from an institutional learning management system to a more navigable website (Google Site) resulted in ease of access and use. This change was made based on the feedback received at the pretest.

ILS courses can be offered at sites mutually convenient for caseworkers and foster youth. The majority of the caseworkers facilitated the course at their respective private sector ILS agencies, while a few utilized coffee shops. The location where the course was facilitated did not affect the YIT participants' satisfaction.

Minor challenges were faced by caseworkers facilitating the online ILS oral health course and youth participants. A high rate of turnover with caseworkers and inadequate staffing posed a challenge in facilitation. Caseworkers verbally reported that they were frequently burdened by other priorities and competing needs of youth, such as transiency and traumatic life experiences. Course facilitation for youth with special needs often necessitated the need to delay the caseworkers' individual post-course assessment, and paper and pencil forms were requested to accommodate completion without online access.

Obtaining routine dental care is the most common unmet need for youth with special health care needs (Chi, 2013). Findings from the YIT post-course evaluation indicated the majority of youth participants strongly agreed that techniques for oral health prevention,

suggested mechanisms for establishing a dental provider, and knowing how to manage dental emergencies were noted as important. They also valued the content on good oral hygiene, habits which are considered important to the prevention of dental diseases, and maintenance of overall health.

**Conclusion**

This project explored the development and delivery of a possible solution to the absence of oral health education for YIT – a model online ILS oral health education course. Online program evaluations were used to explore the perceptions of YIT regarding an oral care education program and perceptions of caseworkers regarding implementation of an online course designed for them to facilitate for YIT, and to propose a model online ILS oral health program as potential solution to address the need for oral health education for YIT and barriers associated with the implementation. Findings show there was a strong overall consensus that all participants, foster youth and caseworkers, found the course helpful and informative, suggesting it could represent a viable intervention for future programmatic replication.

For a mass public offering of the online course to any interested caseworker or agency, caseworker training could be presented by video and the online course could be supplemented with audio instruction. Introduction of an online oral health ILS course earlier during a youth's ILS program could mitigate course retention rate and subsequently offer an opportunity to follow-up on behavioral outcomes through a pre- and post-test. Providing an oral health education program for youth caregivers and/or parents could further enhance educational goals. A larger sample and a more robust program evaluation, a focus group for caseworker insights, or

a qualitative evaluation could offer further understanding into the challenges faced by YIT as they transition and the overburdened caseworkers who are part of their emancipation process.

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## Appendix A

### Permission to Conduct Study: Youthnet

January 2, 2018

RE: Permission to Conduct Exploratory Program Evaluation: Youthnet

Dear_____,

I am writing to officially request permission to conduct an exploratory program evaluation at Youthnet. I am a graduate student in the Masters of Science in Dental Hygiene Program at Idaho State University. I am in the process of conducting my thesis study. The study is entitled *Foster Youth in Transition: An Exploratory Evaluation Study of Oral Health Education in Adult Transition Planning*. Based on discussions with _____, Youthnet caseworkers will assist in recruitment of at least 30 youth to participate in this exploratory evaluation study. This evaluation consists of an online ILS oral health education program and a post-course evaluation determine the oral health knowledge of youth regarding the establishment of a dental home for emergency and preventive oral health services. Both Youthnet participants and caseworkers will receive the same training and questionnaires via Community Moodle, an online learning management software system at Idaho State University. Caseworkers will receive training prior to commencement of the program. A copy of the curriculum and questionnaires will be sent to the Youthnet caseworkers for their review and input.

Interested students, who volunteer to participate, will be given an assent form. Consent forms will be given to caseworkers to be signed prior to the start of the program. If approval is granted, participants and caseworkers will complete a post-course project evaluation.

Depending on the child's individual needs, the survey process may add a few additional minutes to the regularly scheduled program.

The principle investigator, Nina Karhinen, will be present to facilitate training for participants on the agreed upon date: January 31, 2018 at Youthnet. Caseworkers, outside of Whatcom County, will facilitate training via Idaho State University's Community Moodle Learning Management System on a laptop or tablet device one-on-one on subsequent dates at locations agreed upon between social workers and caseworkers. The online ILS oral health education program will include a post-course evaluation. The duration of the training session may take 30 minutes, depending on the participants' individual learning needs.

The survey results will be pooled for the thesis project and individual results of this study will remain confidential and anonymous. Should this study be published, only aggregate results will be reported. The school/center and the individual participants will not incur any costs for participation. Oral health aid incentives will be donated through Mount Baker Dental Hygienists' Association.

Your approval to conduct this study will be greatly appreciated. I will follow up with the aforementioned documents and a telephone call next week and I would be happy to answer any questions or concerns you may have at that time. You may contact me at my email address: nina.e.karhinen@gmail.com .

Sincerely, Nina Karhinen, RDH, BSDH
Enclosures

cc: Denise M. Bowen, RDH, MS, Professor Emeritus, Major Thesis Research Co-Advisor

Jacqueline Freudenthal, RDH, MHE, Major Thesis Research Co-Advisor
Approved by: Date:

## Appendix B

## Permission to Conduct Study: Olive Crest

March 19, 2018

RE: Permission to Conduct Exploratory Program Evaluation Olive Crest

Dear Program Director,

I am writing to officially request permission to conduct an exploratory program evaluation at Olive Crest. I am a graduate student in the Masters of Science in Dental Hygiene Program at Idaho State University. I am in the process of conducting my thesis study. The study is entitled Foster Youth in Transition: An Exploratory Program Evaluation of Oral Health Education in Adult Transition Planning

Based on discussions with _____, Olive Crest caseworkers will assist in recruitment and facilitation of youth who participate in this exploratory program evaluation. This evaluation consists of an online ILS oral health education program and a post-course evaluation to examine the perceptions of YIT and caseworkers regarding an oral care education program designed to improved dental outcomes for youth in transition.

All participants will be offered the same course and questionnaires via an online Google site. Caseworkers will receive training prior to commencement of the program. A copy of the curriculum and questionnaires will be sent to the Olive Crest caseworkers for their review and input.

Interested students, who volunteer to participate, will be given an informative invitation letter. If participant approval is granted, caseworkers will facilitate the online course at a computer station one-on-one. The oral health education course will include a post-course evaluation. Caseworkers will complete a separate post-course evaluation. The duration of the online course may take 30 minutes, depending on the participants' individual learning needs.

The survey results will be pooled for the thesis project and individual results of this study will remain confidential and anonymous. Should this study be published, only aggregate results will be reported. The school/center and the individual participants will not incur any costs for participation. Oral health aid incentives will be donated through Mount Baker Dental Hygienists' Association.

Your approval to conduct this study will be greatly appreciated. I will follow up with the aforementioned documents and a telephone call next week and I would be happy to answer any questions or concerns you may have at that time. You may contact me at my email address: nina.e.karhinen@gmail.com .

Sincerely, Nina Karhinen, RDH, BSDH

Enclosures

cc: Denise M. Bowen, RDH, MS, Professor Emeritus, Major Thesis Research Co-Advisor

Jacqueline Freudenthal, RDH, MHE, Major Thesis Research Co-Advisor

Approved by: Date:

## Appendix C

## Permission to Conduct Study: YouthCare

RE: Permission to Conduct Exploratory Program Evaluation

Dear Program Director,

I am writing to officially request permission to conduct an exploratory program evaluation at Youthcare. I am a graduate student in the Masters of Science in Dental Hygiene Program at Idaho State University. I am in the process of conducting my thesis study. The study is entitled *Foster Youth in Transition: An Exploratory Program Evaluation of Oral Health Education in Adult Transition Planning.*

Caseworkers will assist in recruitment and facilitation of youth who participate in this exploratory program evaluation. This evaluation consists of an online oral health course and a post-course evaluation to examine the perceptions of YIT and caseworkers regarding an oral care education program designed to improved dental outcomes for youth in transition.

All participants will be offered the same course and questionnaires via an online Google site. Caseworkers will receive training prior to commencement of the program. A copy of the curriculum and questionnaires will be sent to the caseworkers for their review and input.

Interested students, who volunteer to participate, will be given an informative invitation letter. If participant approval is granted, caseworkers will facilitate the online course at a computer station or handheld device one-on-one. The oral health education course will include a post-course evaluation. Caseworkers will complete a separate post-course evaluation. The

duration of the online course may take 30 minutes, depending on the participants' individual learning needs.

The survey results will be pooled for the thesis project and individual results of this study will remain confidential and anonymous. Should this study be published, only aggregate results will be reported. The school/center and the individual participants will not incur any costs for participation. Oral health aid incentives will be donated through Mount Baker Dental Hygienists' Association.

Your approval to conduct this study will be greatly appreciated. I will follow up with the aforementioned documents and a telephone call next week and I would be happy to answer any questions or concerns you may have at that time. You may contact me at my email address: nina.e.karhinen@gmail.com .

Sincerely,

Nina Karhinen, RDH, BSDH

Enclosures

cc: Denise M. Bowen, RDH, MS, Professor Emeritus , Major Thesis Research Co-Advisor

Jacqueline Freudenthal, RDH, MHE, Major Thesis Research Co-Advisor

Approved by:

_____ _____ 5/14/18

## Appendix D

## Project Invitation and Consent

You are invited to participate in a project entitled *Foster Youth in Transition: A Program Evaluation of Oral Health Education in Adult Transition Planning.* A dental hygienist, Nina Karhinen from Idaho State University, is conducting this project. You were selected to participate because you are a youth in transition between the ages of 15-21 and are taking independent living skills classes at Youthnet. We also believe that oral health classes are important for you before emancipation, so we want to offer one to you.

The purpose of this project is to get your perceptions and your caseworkers' opinions about the online ILS oral health education program designed to teach you about taking care of your teeth and gums. We value your opinion. You will complete the course at a place both you and the caseworker agree on. The course will take about 30 minutes. The caseworker will help you to complete the course online and to fill out a brief questionnaire (5-10 minutes) about the course when you are finished. Our hope is that you will learn about oral health and disease, how to prevent dental decay and gum disease, how to find a dental home, and what to do it a dental emergency.

Your participation is completely voluntary and you can withdraw at any time. You are free to skip any question in the questionnaire that you choose, and your answers will be kept confidential. By enrolling for the online class and questionnaire you are indicating that you have read and understood this information and you agree to participate in this project.

If you have questions about this project, you may contact Nina Karhinen at (360) 510-1655 or nina.e.karhinen@gmail.com. Thank you in advance for your cooperation and support.

**Appendix E**

**Recruitment Flyer**

# HEALTHY MOUTH:

# ORAL HEALTH CLASS

JANUARY 31, 2018

4:00-5:30

**Healthy Mouth: Oral Health Training**

**<u>Learn about:</u>**

- **The importance of a healthy smile**
- **Recognition and prevention of dental and gum diseases**
- **Oral health self-care techniques**
- **How to find a dental home**
- **What to do in a dental emergency**

By attending this class, you will help a local dental hygiene educator, Nina, complete her Master's degree studies in which she is evaluating the potential success of an oral health training pilot program for youth.

**HOW DO I SIGN UP?**

- **Call Youthnet and your caregiver will help you sign up**
- **Class will be facilitated online on 1/31/18 at 4:00 p.m. at the Mt. Vernon Youthnet classroom OR one-on-one with your Youthnet caregiver between 1/31-2/28**

**FREE DENTAL HEALTH PRODUCTS!**

Youthnet

A support network for our youth.

## Appendix F

## Oral Health Course: Caseworker Training

| | |
|---|---|
| Course title | *Healthy Mouth-Oral Health Course* |
| Research Study Title | *Foster Youth in Transition: An Exploratory Program Evaluation of Oral Health Education in Adult Transition Planning*<br>Principle investigator, Nina Karhinen<br>Co-major |
| Research Team & Contacts | • Nina Karhinen, RDH, BSDH, Principle Investigator<br>nina.e.karhinen@gmail.com (360) 510-1655<br>• Co-Major Thesis Advisor, Denise Bowen<br>bowedeni@gmail.com (208) 241-0628<br>• Co-Major Thesis Advisor, Jacque Freudenthal<br>freujacq@isu.edu |
| Purpose | The purpose of this exploratory evaluation project is to develop a model online independent living skills oral health course for YIT and to address barriers associated with feasible implementation. |
| Evaluation measures: | Self-designed questionnaire:<br>• Post-course program evaluation on Moodle for participants<br>• Post-course program evaluation on Moodle for caseworkers |

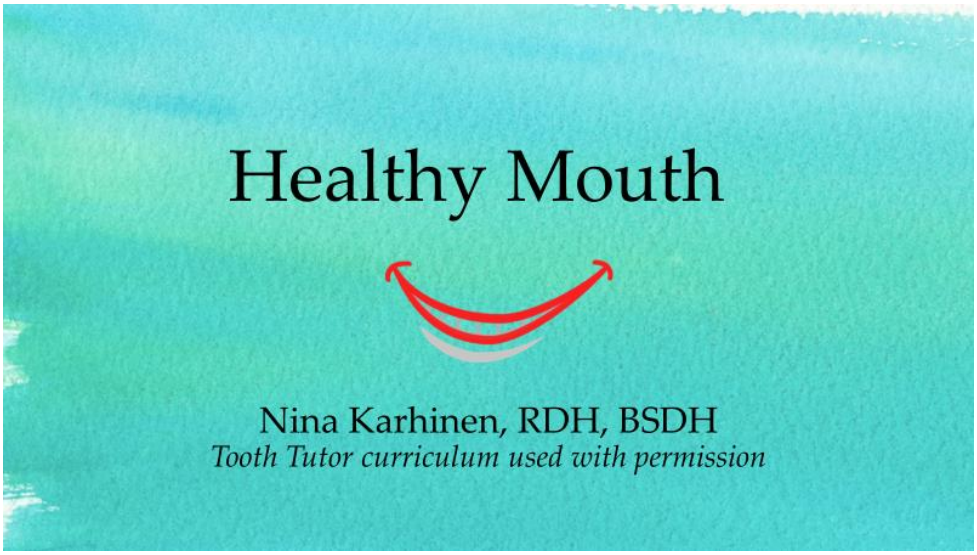
| | |
|---|---|
| | • Will be available online. A paper copy for participants preferring that mode of completion will also be available· |
| Facilitator (Caseworker) Role: | 1. Send flyer to participants (Case manager will email them to caseworkers) electronically (see attached).<br>2. Contact participant's social worker and/or caregivers; and allow participants to read invitation letter prior to enrollment (see attached)<br>3. Accept invitation to Idaho State University Community Moodle Online Learning Management System from Nina in February 2018.<br>4. Idaho State University's Community Moodle Doc enrollment and facilitation training will be sent to caseworkers electronically by the principle investigator following the invitation<br>5. Each caseworker will need to create their own account<br>6. Look for course entitled *Healthy Mouth* on Community Moodle home page https://elearn.isu.edu/community/login/index.php<br>7. Each student will need to create their own account as well<br>8. Follow-up training in-person with principle investigator (Nina) on January 31st at Youthnet campus<br>9. Course Navigation:<br>• Conduct a test of Moodle LMS prior to meeting client<br>• Youthnet participant should progress through topics (content) in sequence on Moodle |

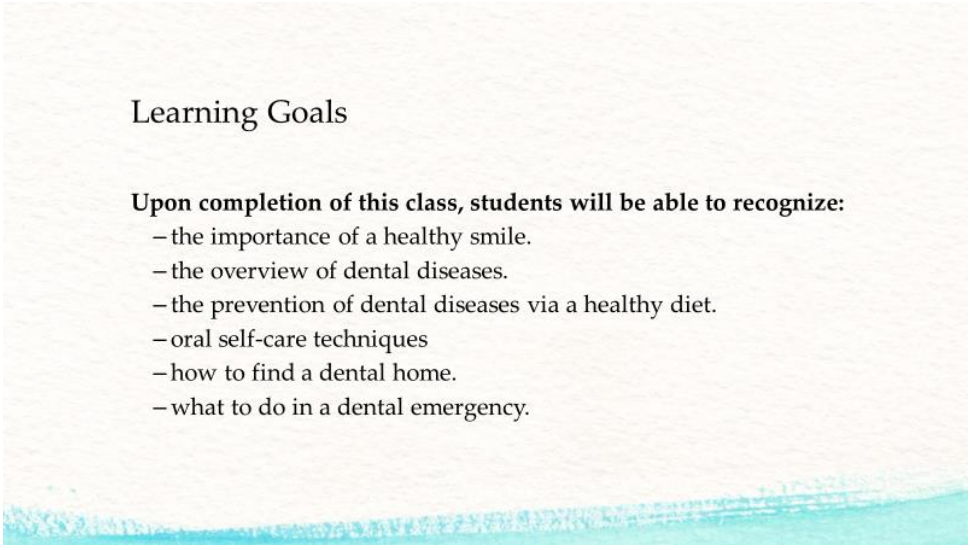
| | |
|---|---|
| | • Each topic should be expanded to open more pages and videos<br>• Once all topics have been viewed, the post-course evaluation can be accessed via the quiz page entitled "Participant Post-Course Evaluation"<br>10. Facilitator Role:<br>• Indicate whether child needs special accommodations<br>• Offer technical help or clarification with navigating online course and post-course if needed<br>• Unbiased role. Facilitator may answer participants' questions without influencing post-course evaluation answers<br>• Call Nina if questions arise regarding content or course management<br>• Give participants a goody bag |
| Duration: | • Educational component: 15-30 minutes<br>• Post-course evaluation- 5-10 minutes<br>• Time requirements dependent on learner's individual needs |
| Equipment: | Laptop, desktop computer. Internet access, telephone. |

| | |
|---|---|
| Material & resources: | Paper and pencil, upon request/ need |
| Facilitation: | Thank you for your willingness to help! My hope and desire is that this small exploratory program evaluation will be a success and can grow in the future.<br>Respectfully yours,<br>Nina Karhinen |

**Appendix G**

**Educational Content**



## Learning Objectives

**Upon completion of this class, students should be able to:**

1. Recognize the function of teeth and why they are important.
2. Describe how dental diseases progress.
3. Recognize how oral health impacts overall health.
4. Identify how nutrition affects oral health.
5. Recognize how to prevent cavities from forming through proper self-care techniques.
6. Explain why it is important to find a dental home.
7. Describe dental injury prevention and emergency care guidelines.

## Assessment Methods

- Emancipating youth who participate in the Healthy Mouth Oral Health independent living skills (ILS) online training will be assessed in a post-course evaluation on their perceptions of the benefits of an online oral health ILS course for emancipating youth regarding individual oral health practices, in addition to the improvement needed in the ILS oral health course in the future.
- Caseworkers who facilitate the Healthy Mouth Oral Health independent life skills (ILS) online training will be assessed in a post-course evaluation on their perceptions of the benefits of an online oral health ILS course for emancipating youth regarding individual oral health practices, in addition to suggested improvements for future ILS oral health courses.

## Why a Healthy Mouth is Important

**Healthy teeth, gums, and oral Tissues (cheeks, tongue, lips, roof of the mouth-or palate) allow us to:**

- Eat- chew a variety of foods and taste food
- Drink
- Smile
- Talk
- Sing

## Why a Healthy Mouth is Important


http://www.worldlifeexpectancy.com/healthy-life-expectancy-by-gender

**Healthy gums:**

- Gums and bone (underneath gums) anchor teeth in place
- Healthy gums promote overall health and prevent complications if sick

## Why a Healthy Mouth is Important


https://pixabay.com/en/smile-text-yellow-smiling-1314881/

**A Healthy Mouth Promotes Self-esteem and Aids In:**

- Looking for a job
- Smiling
  - Healthy teeth, gums, and mouth give a balanced shape to the face
- Obtaining fresh breath
- **Feeling about appearance**
  - You may want braces
  - You may want to get some dental care taken care of

**How does your smile make you feel?**

## Dental Diseases: Costly and Preventable

**Tooth decay (cavities)** is the most common chronic disease on the planet in children and adolescents *yet* it is completely preventable. Yet, when tooth decay is present and ignored, it is often painful and costly to treat

## CAVITIES


http://kidshealth.org/KidsHealthDemo/en/parents/az-dental-cavities.html

### CAVITIES (DENTAL DECAY)

- **Definition-** destruction of your tooth enamel, the hard, outer layer of your teeth, ultimately causing a hole.
- **Cause-** Plaque formation, or sticky bacteria, which multiply on teeth/mouth when foods and drinks containing sugars are consumed. Not brushing and flossing the sticky bacteria off can produce acids on teeth. The acids, bacteria, food particles, and saliva form plaque. Acids + plaque destroy tooth's outer layer and can form a cavity over time.

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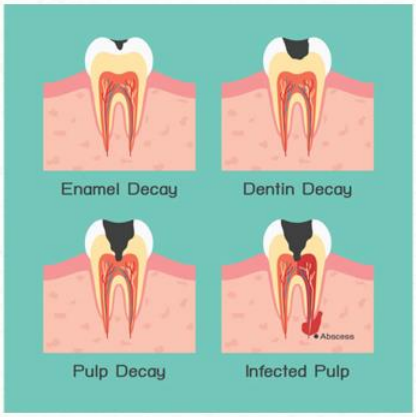
**Stages & Signs of a Cavity (Decay):**

**1. Enamel Decay-**outer layer cavity, reversible with fluoride. May look like a white or brown spot.
**2. Dentin Decay-** needs a filing, may or may not be painful
**3. Pulp Decay-** Painful. Into blood vessels and nerves
**4. Infected Pulp-** Infected tooth from inside/ out. Very painful. Needs to be treated!




## Symptoms of Cavities

**What are the Symptoms (What can be felt) of Cavities?**

**Early phase:** there may or may not be pain

**Visible and larger cavity:**

- **Pain**
- **Pus (sometimes)**
- **Pressure (pain with biting)**
- **Temperature sensitivity**
- **Noticeable holes, pits, discolorations, or broken/ fractured areas of tooth.**

## Gum Disease (Gingivitis)


https://www.youtube.com/watch?v=6JsCx5nWlaE

- Gingivitis is a common infection among most children and adolescents.
- Gingivitis causes gum tissue to swell, turn red, and bleed easily.
- If left untreated, it can eventually advance to more serious forms of gum disease.
- It is preventable with a regular routine of brushing and flossing and the absence of smoking.
- The good news is that tooth decay and gum disease are preventable at home and school through measures such as healthy nutrition, good oral hygiene, fluoride, sealants, not smoking, and leading a healthy lifestyle.

## Gum Disease: Gingivitis

**Gum Disease (Gingivitis)**

- **Symptoms (what you feel)**
  - **Gums that may be swollen or bleed easily**
  - **Tender gums**
  - **Bad breath**
- **Signs (what you see)**
  - **Red, puffy gums**
  - **Bleeding. For example, do you see blood on your toothbrush?**

## Preventing Dental Diseases

**LIMIT SWEETS AND HIDDEN SWEETS:**

- **Soda**
- **Energy Drinks**
- **Eating or sucking on candies throughout day (especially sticky)**

http://www.befittoo.com/index.php/2015/12/23/a-very-sugary-diet-decreases-your-ability-to-learn/

## How Much Sugar?

- One can or 355 ml (12 oz) of Coke has 39 g or 9.75 teaspoons of sugar in it.
- One 8.4 fl oz Red Bull Energy Drink contains 27g of sugar.
- Apple and orange juices are comparable to the above examples!

## Preventing Dental Diseases

**Eat Healthy and Well-Balanced Meals**

- https://www.choosemyplate.gov/


- **Drink Plenty of water**
  - **Helps you feel full, prevents overeating (it is calorie-free)**
  - **Prevents dehydration**
  - **Helps with defend against tooth decay by preventing dry mouth and cleansing mouth**

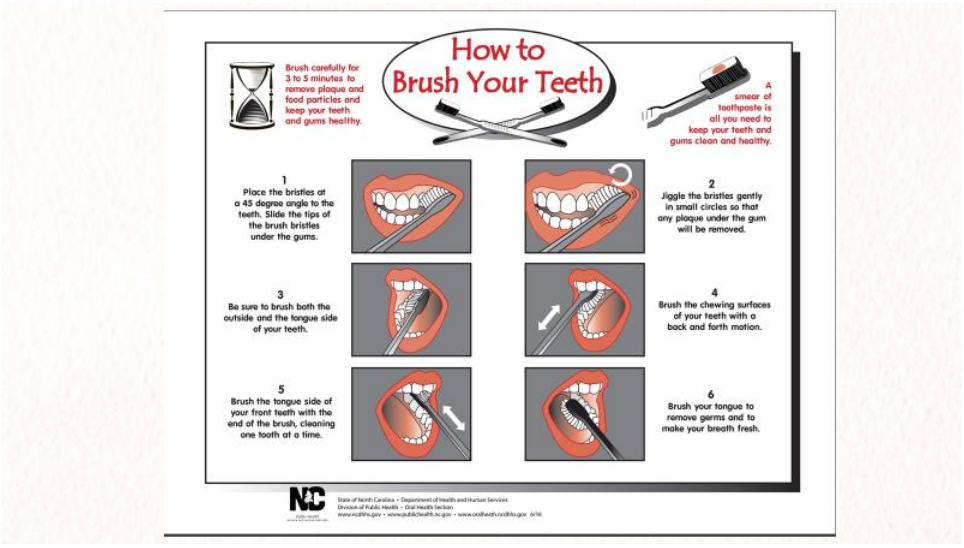
## Toothbrushing

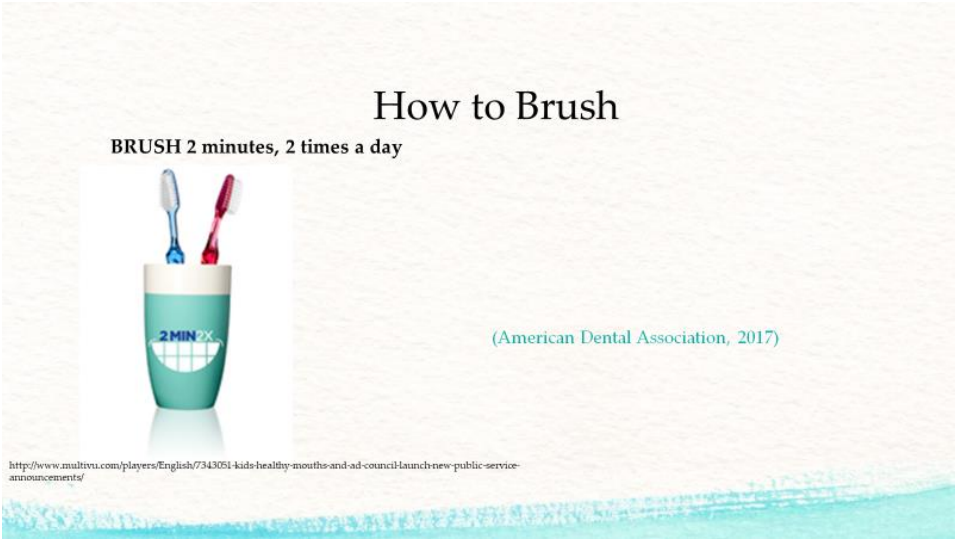
- Electric Brushes
- Manual Brushes

*Which is better?*

*Whichever one you can effectively use around each tooth surface*

https://www.rifkindental.com/blog/electric-versus-manual-toothbrush


How to Brush Your Teeth
Brush carefully for 3 to 5 minutes to remove plaque and food particles and keep your teeth and gums healthy.
A smear of toothpaste is all you need to keep your teeth and gums clean and healthy.
1
Place the bristles at a 45 degree angle to the teeth. Slide the tips of the brush bristles under the gums.
2
Jiggle the bristles gently in small circles so that any plaque under the gum will be removed.
3
Be sure to brush both the outside and the tongue side of your teeth.
4
Brush the chewing surfaces of your teeth with a back and forth motion.
5
Brush the tongue side of your front teeth with the end of the brush, cleaning one tooth at a time.
6
Brush your tongue to remove germs and to make your breath fresh.
NC
State of North Carolina • Department of Health and Human Services
Division of Public Health • Oral Health Section


How to Brush
BRUSH 2 minutes, 2 times a day
2MIN2X
(American Dental Association, 2017)
http://www.multivu.com/players/English/7343051-kids-healthy-mouths-and-ad-council-launch-new-public-service-announcements/

## Other Toothbrushing Tips

- Use a light grasp when holding handle of brush (manual or electric)
- If grasp and handling of a brush is tricky, care should be taken in prevention of injuries.
- Important to brush tongue as well
- Don't share toothbrushes
- Let your toothbrush air-dry after each use
- Replace your toothbrush every 3 months

## Toothpaste

**What to look for when shopping:**

- American Dental Association (ADA) Seal of Acceptance
- Fluoride

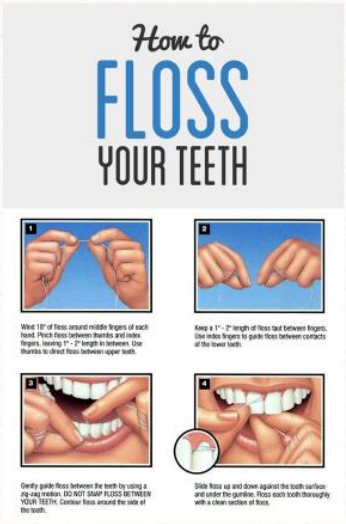
**Appropriate amount when brushing:**

- Smear to pea-sized

## How to Floss

1. Wind 18 inch floss piece around middle fingers (each hand). Pinch floss between index fingers and thumb, leaving about 1 inch in between. Use thumbs to direct between upper teeth.
2. Keep 1 inch length tight between fingers. Use index fingers (or thumbs) to guide floss between lower teeth.
3. Zig zag or scrub floss up and down without snapping gums until floss makes "squeak" sound on both sides of teeth.
4. Remember to move floss along to use a clean piece.

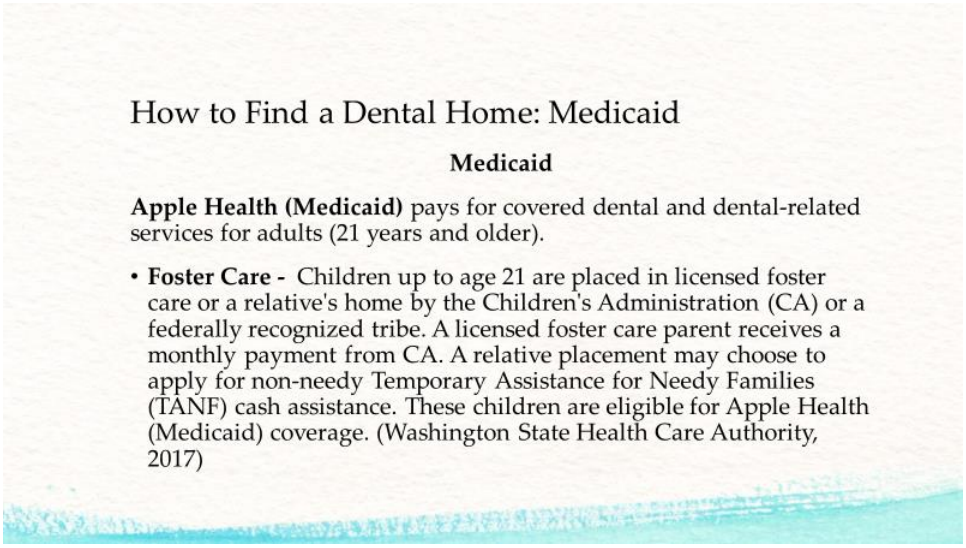
http://www.tribecasmiles.com/how-to-properly-floss-your-teeth-infographic/

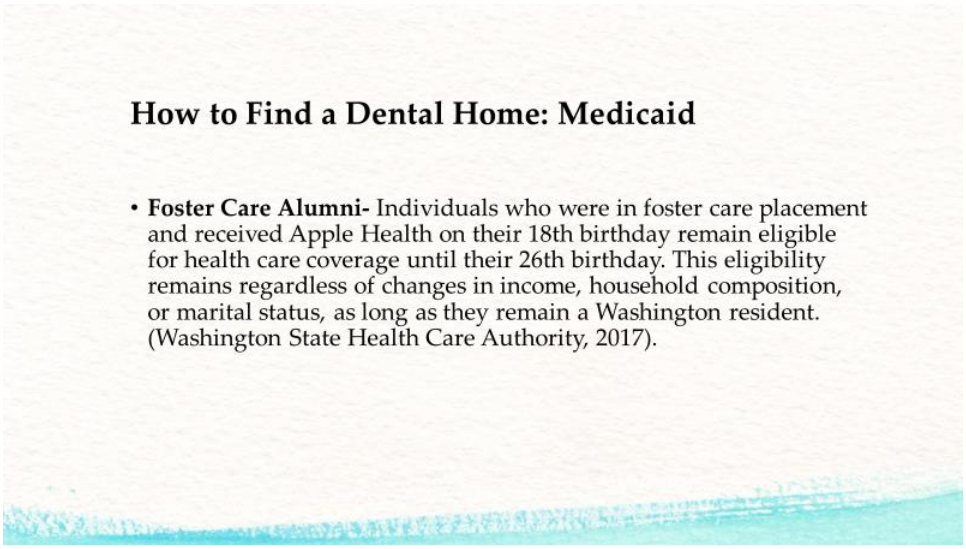



## Flossing

- **Flossing**
- **ADA video:** https://www.youtube.com/watch?v=HhdoPXNKNm4

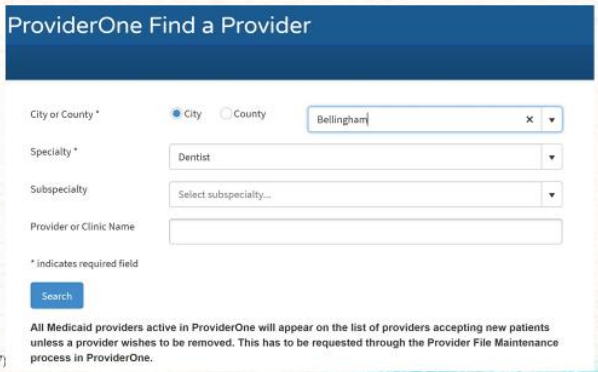
(American Dental Association, 2017)


How to Find a Dental Home: Medicaid
Medicaid
Apple Health (Medicaid) pays for covered dental and dental-related services for adults (21 years and older).
• Foster Care - Children up to age 21 are placed in licensed foster care or a relative's home by the Children's Administration (CA) or a federally recognized tribe. A licensed foster care parent receives a monthly payment from CA. A relative placement may choose to apply for non-needy Temporary Assistance for Needy Families (TANF) cash assistance. These children are eligible for Apple Health (Medicaid) coverage. (Washington State Health Care Authority, 2017)


How to Find a Dental Home: Medicaid
• Foster Care Alumni- Individuals who were in foster care placement and received Apple Health on their 18th birthday remain eligible for health care coverage until their 26th birthday. This eligibility remains regardless of changes in income, household composition, or marital status, as long as they remain a Washington resident. (Washington State Health Care Authority, 2017).

## How to Find a Dentist

1. Go to: https://fortress.wa.gov/hca/p1findaprovider/
2. Select city
3. Specialty, select dentist
4. Click search button




(Washington State Health Authority, 2017)

## Dental Home

- Find a dental office you like
- Visit their office regularly for preventive visits (regular cleanings, exams, and x-rays)
- If you move, find another office and have your records sent
- It is important to maintain regular visits to avoid emergency trips

## Dental Emergencies

- **Here are some tips for common dental emergencies:**
- Knocked out teeth: For a knocked-out permanent or adult tooth, keep it moist at all times. If you can, try placing the tooth back in the socket without touching the root. If that's not possible, place it in between your cheek and gums, in milk, or use a tooth preservation product that has the ADA Seal of Acceptance. Then, get to your dentist's office right away.
- For a cracked tooth, immediately rinse the mouth with warm water to clean the area. Put cold compresses on the face to keep any swelling down.

## Dental Emergencies and What to Do

- **Biting your lip or tongue:** clean the area gently with water and apply a cold washcloth.
- **Toothaches:** rinse the mouth with warm water to clean it out. Gently use dental floss to remove any food caught between the teeth. Do not put aspirin on the aching tooth or gum tissues.
- **For objects stuck in the mouth**: try to gently remove with floss but do not try to remove it with sharp or pointed instruments.

## Dental Emergencies

**Here are some simple precautions you can take to avoid accident and injury to the teeth:**

- **Sports and high contact activities:** Wear a mouthguard to prevent cracking a tooth or damage.
- Avoid chewing ice, popcorn kernels and hard candy, all of which can crack a tooth.
- Use scissors, **NEVER** your teeth, to cut things.
- Most dentists reserve time in their daily schedules for emergency patients. Call your dentist and provide as much detail as possible about your condition.
- **When you have a dental emergency, it's important to visit your dentist or an emergency room as soon as possible!**

## Wisdom Teeth

Average age of Wisdom Tooth Eruption (when they come in): 17-21

- Reasons wisdom teeth need to be extracted (removed):
  - Crowding, which may lead to further complications
  - Pain
  - Infection or Gum Disease
  - Cysts or Tumors
  - Damage to neighboring teeth
  - Tooth decay (if it is not possible or desirable to restore the tooth)


http://www.myaquadental.com/blog/understanding-wisdom-teeth/

## Post-course Evaluation

**Instructions:**

Please answer the following questions on the next page to the best of your ability. The main goal is to review your perceived benefits of an online oral health independent learning services (ILS) course for emancipating youth regarding individual oral health practices, in addition to the improvement needed in the ILS oral health course in the future. Thanks in advance for your time and attention!

Nina, Principle investigator

Idaho State University

## References


- American Dental Association, Mouth Healthy. (2017). *Brushing your teeth.* Retrieved from http://www.mouthhealthy.org/en/az-topics/b/brushing-your-teeth
- American Dental Association, Mouth Healthy. (2017). *Flossing.* Retrieved from http://www.mouthhealthy.org/en/az-topics/f/flossing
- ChooseMyPlate.gov. (2017). Retrieved from https://www.choosemyplate.gov/MyPlate-Daily-Checklist
- Washington State Health Care Authority. (2017). *Foster care.* Retrieved from https://www.hca.wa.gov/free-or-low-cost-health-care/apple-health-medicaid-coverage/foster-care#foster-care-alumni
- Washington State Health Care Authority. (2017). *Provider one find a provider*. Retrieved from https://fortress.wa.gov/hca/p1findaprovider/
- Washington State Department of Health Oral Health Program. (2011). *Tooth Tutor: A simplified oral health curriculum for Pre-K to grade 12, (2nd ed.)* Retrieved from https://here.doh.wa.gov/portals/14/Materials/160-083-ToothTutor-en-L.pdf

## Appendix H

## Permission to Use Tooth Tutor and ADA Mouth Healthy Content

8-31-17

Hello,

As a part of the requirements for a Master of Science in Dental Hygiene degree at Idaho State University, I am proposing a study for my thesis research, entitled *Foster youth in transition: An assessment of oral health education in adult transition planning*. I am writing to request permission to use content related to adolescent oral health preventive and emergency care, in addition to dental home for oral health education--provided with proper citations and links.

Thank you,

Nina Karhinen, RDH, BSDH

nina.e.karhinen@gmail.com

9/1/17

Hi Nina,

Feel free to use any content you like with the proper citations and links. Best of luck on your thesis!

Best,

Joan

**Joan Podrazik** podrazikj@ada.org

Manager, Consumer Content
Integrated Marketing and Communications
312.440.2798
**American Dental Association** 211 E. Chicago Ave. Chicago, IL 60611 www.ada.org

November 26, 2017

Hello Shelley,

As a part of the requirements for a Master of Science in Dental Hygiene degree at Idaho State University, I am proposing a study for my thesis requirement, entitled *Foster Youth in Transition: An Exploratory Program Evaluation of Oral Health Education in Adult Transition Planning.* I am writing to request permission to use the Department of Health *Tooth Tutor* content (with proper citations and links), as part of my thesis that involves providing oral health independent life skills training for emancipating adolescents at Youthnet.

Thank you,

Nina Karhinen, RDH, BSDH

karhnina@isu.edu or nina.e.karhinen@gmail.com

(360) 510-1655

November 27, 2017

Hello Nina,

Thank you for your message. It sounds like a great thesis project. Yes, you have permission to use content from the Washington State Department of Health Tooth Tutor, with proper citations and links, in your paper.

Please let me know if there is anything else I can assist you with.

All the best,

*Shelley*

Shelley Guinn, MPH, RDH

Oral Health Consultant

Washington State Department of Health

Division of Prevention & Community Health

Desk: 360-236-3524

Shelley.Guinn@DOH.WA.GOV

## Appendix I

## Post-Course Evaluation Form for YIT Participants

**Location of training: _____**

**Teacher:** Nina Karhinen, RDH, BSDH

**Facilitator (your caseworker): _____ Date: _____**

**Please provide the following information**:

**Age**: _____ **Sex**: **F _____ M _____ Rather not specify _____**

**Currently or previously in foster care or other type of care? Yes _____No _____**

**If so, what type of care? _____**

**Rather not specify _____**

**Are you currently a youth in transition, between the ages of 15-21 years, seeking emancipation?**

**Yes _____ No _____**

**Are you currently a runaway youth seeking emancipation (in state or custodial parent care)? Yes _____ No _____**

**Have already received Independent Life Skills transition classes? Yes _____No _____**

**Do you need any special accommodations? Yes____ No_____**

**If so please indicate what is needed: _____**

| **Instructions:** Please indicate your level of agreement with the statements listed below in #1-13. | | | | | |
|---|---|---|---|---|---|
| **Statements** | 5<br>Strongly Agree | 4<br>Agree | 3<br>Neither Agree or Disagree | 2<br>Disagree | 1<br>Strongly Disagree |
| 1. The location for the online oral health course was adequate. | | | | | |
| 2. I had adequate time to complete the online course. | | | | | |
| 3. The objectives of the training were clear. | | | | | |
| 4. I was able to use the Community Moodle Learning Management Software (online program) training with no or few difficulties. | | | | | |
| 5. The topics addressed in the course were relevant to me. | | | | | |
| 6. I realize the importance of general oral health better now than I did before the course. | | | | | |
| 7. This course made me more aware of the benefits of early recognition of dental diseases. | | | | | |
| 8. I understand more about how healthy eating habits can help prevent dental diseases. | | | | | |
| 9. I can improve my brushing and flossing techniques based on what I learned today. | | | | | |
| 10. The course provided information that will help me find a dental home when I am on my own. | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 11. The course provided helpful information about dental emergencies. | | | | | |
| **Question:** | **Please provide a comment to the following 2 questions**: | | | | |
| 12. What did you find most helpful in this oral health course? | | | | | |
| 13. What did you find the least helpful in this oral health online course? | | | | | |

**Thank you for your participation and feedback!**

## Appendix J

## Post-Training Evaluation Form for Caseworkers

**Location of course: _____**

**Trainer:** Nina Karhinen, RDH, BSDH

**Facilitator: _____ Date: _____ Please complete each item on this questionnaire and provide comments to help enhance this course for youth in transition if the future. Instructions:** Please indicate your level of agreement with the statements listed below in #1-7 and feel free to make additional comments.

| **Statements** | 5 Strongly Agree | 4 Agree | 3 Neutral | 2 Disagree | 1 Strongly Disagree | **Comments** |
|---|---|---|---|---|---|---|
| 1. The caseworker training about content and administration of the course was adequate. | | | | | | |
| 2. The participant had adequate time to complete the course. | | | | | | |
| 3. The objectives of the course were clear. | | | | | | |
| 4. I was able to facilitate the Community Moodle Learning Management Software (online program) with no or few difficulties. | | | | | | |
| 5. The topics addressed in the course seemed relevant to the participant. | | | | | | |
| **As the course facilitator, I would rate the participant's interest in each of the topics addressed as follows:** | | | | | | |
| | **5 Very interested** | **4 Interested** | **3 Neutral** | **2 Somewhat interested** | **1 Not interested** | **Comment(s)** |
| 6.The participant seemed to be interested in the following topics addressed in this course: | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| a) The importance of general oral health. | | | | | | |
| b) The benefits of early recognition of dental diseases. | | | | | | |
| c) How healthy eating habits can help prevent dental diseases. | | | | | | |
| d) Improving brushing and flossing techniques. | | | | | | |
| e) Finding a dental home when I am on my own. | | | | | | |
| f) The course provided helpful information about dental information. | | | | | | |

| **7. As the course facilitator, I would rate the level of information in each of the following topics for this participant addressed as follows:** | | | | |
|---|---|---|---|---|
| | **3 Appropriate** | **2 Too Difficult** | **1 Too Basic** | **Comments:** |
| a) Importance of good oral health | | | | |
| b) The benefits of early recognition of dental diseases. | | | | |
| c) How healthy eating habits can help prevent dental diseases. | | | | |

| | | | | |
|---|---|---|---|---|
| d) Improvements in brushing and flossing techniques based on course material. | | | | |
| e) Information regarding finding a dental home. | | | | |
| f) Information about dental emergencies. | | | | |
| **Please answer the following questions and feel free to make any additional comments.** | | | | |
| 8. What did you find most helpful in this oral health course? | | | | |
| 9. What did you find the least helpful in this oral health course? | | | | |
| 10. What aspects, if any, of this course could be implemented within emancipating youth's independent living skills program? | | | | |

**Thank you for your participation and feedback!**

# Appendix K

## Panel of Experts Request

January 15, 2018

Dear :

As a candidate for the Master of Science in Dental Hygiene degree at Idaho State University, I am in the process of completing my thesis, entitled *Foster Youth in Transition: An Exploratory Program Evaluation of Oral Health Education in Adult Transition Planning*. The aim of this project is to offer an online oral health program at a local facility that offers independent living skills classes and services for emancipating foster youth. Both the Youthnet caseworkers and I will facilitate the course and post-course evaluations.

The purpose of this program evaluation project is to explore perceptions of youth in transition (YIT) participants, ages 15-21, and their caseworkers about an online oral health education course. A dental hygienist will provide this Independent Living Services educational intervention class for YIT, and a caseworker will facilitate the course as part of their overall transition plan prior to emancipation. Feasible options for practical implementation will be explored.

The program evaluation will use an exploratory study approach. The study questions are listed at the top of each post-course evaluation instrument, one for the YIT participants and one for the caseworkers facilitating the course.

I am contacting you to request your assistance as an expert in the area of community oral health and special needs populations. Content validity for two post-course evaluation instruments need to be established prior to data collection. My thesis major co-advisors, Jacque Freudenthal and Denise Bowen, and I would be very much appreciate of your time and expertise

in reviewing these post-course program evaluation tools to determine whether each item is relevant to the stated purpose of the study and the proposed study questions for each group completing the post-course evaluations. The first instrument, consisting of 13 items, is designed for the YIT participants to complete. The second instrument, consisting of 10 items, is for the facilitating caseworkers to complete. The instrument reviews should take 15-20 minutes of your time.

You may indicate whether you would be willing to do so by replying to this e-mail. I look forward to hearing from you soon.

Sincerely,

Nina Karhinen, RDH, BSDH

Cc: Denise Bowen and Jacque Freudenthal

**INDEPENDENT LIVING SKILLS ORAL HEALTH POST-COURSE SURVEY FOR YOUTHNET PARTICIPANTS**

**As a subject expert in curriculum development and community health of groups across age spans and developmental stages, please review the following items for their relevance to the purpose of the study, clarity, and relevance to the study questions:**

**Purpose of the study:** The purpose of this exploratory evaluation study is to develop and present an online independent living skills (ILS) oral health care education program, examine the perceptions of YIT and caseworkers regarding an oral care education program designed to improved dental outcomes for YIT, and to identify barriers associated with the implementation of this oral health care education program.

**Exploratory Study Questions:**

1. What aspects of the online independent living skills oral health course do the foster youth participants approaching emancipation perceive were beneficial to them in relation to their own oral health in the future?
2. What aspects of the online independent living skills oral health course do the foster youth participants approaching emancipation perceive need improvement to address their own oral health in the future?

| **Statement** | 5 Strongly Agree | 4 Agree | 3 Neutral | 2 Disagree | 1 Strongly Disagree | Comment(s) **Experts: please provide any comments to improve clarity or relevance of the item in the space provided.** |
|---|---|---|---|---|---|---|
| **Experts: Please rate the relevance of the following items to the purpose of the study and the study questions as follows: 5 = Very relevant; 4 = Relevant; 3 = Somewhat relevant; 2 = Relevant; 1 = Not at all relevant** | | | | | | |
| 1. The location for the online oral health course was adequate. | | | | | | |
| 2. I had adequate time to complete the online course. | | | | | | |
| 3. The objectives of the course were clear. | | | | | | |
| 4. I was able to use the Community Moodle Learning Management Software (online program) with no or few difficulties. | | | | | | |
| 5. The topics addressed in the training program were relevant to me. | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6. I realize the importance of general oral health better now than I did before the course. | | | | | | |
| 7. This course made me more aware of the benefits of early recognition of dental diseases. | | | | | | |
| 8. I understand more about how healthy eating habits can help prevent dental diseases. | | | | | | |
| 9. I can improve my brushing and flossing techniques based on what I learned today. | | | | | | |
| 10. The course provided information that will help me find a dental home when I am on my own. | | | | | | |
| 11. The course provided helpful information about dental emergencies. | | | | | | |
| **Item** | **Comment(s)** | | | | | |
| 12. What did you find most helpful in this oral health online course? | | | | | | |
| 13. What did you find the least helpful in this oral health online course? | | | | | | |

**Thank you for your participation and feedback!**

**INDEPENDENT LIVING SKILLS ORAL HEALTH POST-COURSE SURVEY FOR CASEWORKERS**

**As a subject expert, please review the following items for their relevance to the purpose of the study and study questions and comment on improving the content, relevance, or clarity where needed:**

**Purpose of the study:** The purpose of this exploratory evaluation study is to develop and present an online independent living skills (ILS) oral health care education program, examine the perceptions of YIT and caseworkers regarding an oral care education program designed to improved dental outcomes for YIT, and to identify barriers associated with the implementation of this oral health care education program.

**Exploratory Study Questions:**

1. What aspects of the online independent living skills oral health course do the caseworkers facilitators perceive were beneficial to participating foster youth as they prepare for emancipation?
2. What aspects of the online independent living skills oral health course do the facilitating caseworkers perceive need improvement to address the oral health needs of foster youth approaching emancipation in the future?
3. What content should be included in a model independent living skills oral health educational program for foster youth approaching emancipation?
4. What challenges must be addressed to implement an online oral health education program where a dental hygienist provides an oral health independent living skills educational intervention class for YIT and a caseworker?

| **Statement** | 5 Strongly Agree | 4 Agree | 3 Neutral | 2 Disagree | 1 Strongly Disagree | Comment(s): **Experts: please provide any comments to improve clarity or relevance of the item in the space provided.** |
|---|---|---|---|---|---|---|
| **Experts: Please rate the relevance of the following items to the purpose of the study and the study questions as follows: 5 = Very relevant; 4 = Relevant; 3 = Somewhat relevant; 4 = Relevant; 5 = Not at all relevant** | | | | | | |
| 1. The caseworker training about content and administration of the course was adequate. | | | | | | |
| 2. The participant had adequate time to complete the course. | | | | | | |
| 3. The objectives of the course were clear. | | | | | | |
| 4. I was able to facilitate use of the Community Moodle | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Learning Management Software (online program) with no or few difficulties. | | | | | | |
| 5. The topics addressed in the training program seemed relevant to the participant. | | | | | | |
| **6.** As the course facilitator, I would rate the participant's interest in each of the topics addressed as follows: 5 very interested, 4 interested, 3 somewhat interested, not interested**.** | | | | | | |
| **(Expert: please use the same scale to rate the relevance of this item as a whole.)** | | | | | | |
| a. The benefits of early recognition of dental diseases. | **NA** | **NA** | **NA** | **NA** | **NA** | |
| a. The importance of general oral health. | **NA** | **NA** | **NA** | **NA** | **NA** | |
| b. How healthy eating habits can help prevent dental diseases. | **NA** | **NA** | **NA** | **NA** | **NA** | |
| c. Improving brushing and flossing techniques | **NA** | **NA** | **NA** | **NA** | **NA** | |
| d. Finding a dental home when I am on my own. | **NA** | **NA** | **NA** | **NA** | **NA** | |
| e. The course provided helpful information about dental emergencies. | **NA** | **NA** | **NA** | **NA** | **NA** | |
| **7.** As the course facilitator, I would rate the level of information presented in each of the following topics for this participant as follows: 3= Appropriate, 2 = Too Difficult, 1 = Too Basic | | | | | | |
| **(Expert: please use the same scale to rate the relevance of this item as a whole.)** | | | | | | |
| a. The benefits of early recognition of dental diseases. | **NA** | **NA** | **NA** | **NA** | **NA** | |
| b. How healthy eating habits can help prevent dental diseases. | **NA** | **NA** | **NA** | **NA** | **NA** | |
| c. Improving brushing and | **NA** | **NA** | **NA** | **NA** | **NA** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| flossing techniques | | | | | | |
| d. Finding a dental home when I am on my own. | **NA** | **NA** | **NA** | **NA** | **NA** | |
| e. The course provided helpful information about dental emergencies. | **NA** | **NA** | **NA** | **NA** | **NA** | |
| **Open-Ended Items** | **Comment(s)** | | | | | |
| 8. What did you find most helpful in this oral health course? | | | | | | |
| **Expert Rating of Relevance:** | | | | | | |
| 9. What did you find the least helpful in this oral health course? | | | | | | |
| **Expert Rating of Relevance:** | | | | | | |
| 10. What aspects, if any, of this course could be implemented within emancipating youth's independent living skills program? | | | | | | |

**Thank you for your participation and feedback!**

# Appendix L

## Adoption and Fostering: Manuscript Author Guidelines

*Adoption & Fostering* is the only quarterly UK peer reviewed journal dedicated to adoption and fostering issues. Edited by Roger Bullock (Fellow, Centre for Social Policy, The Social Research Unit at Dartington), it also focuses on wider developments in childcare practice and research, providing an international, inter-disciplinary forum for academics and practitioners in social work, psychology, law, medicine, education, training and caring.

Articles may cover any of the following: analyses of policies or the law; accounts of practice innovations and developments; findings of research and evaluations; discussions of issues relevant to fostering and adoption; critical reviews of relevant literature, theories or concepts; case studies.

All research-based articles should include brief accounts of the design, sample characteristics and data-gathering methods. Any article should clearly identify its sources and refer to previous writings where relevant. The preferred length of articles is 5,000-7,000 words excluding references.

Contributions should be both authoritative and readable. Please avoid excessive use of technical terms and explain any key words that may not be familiar to most readers. *Adoption & Fostering* adheres to the SAGE Harvard reference style.

## Appendix M

### Table 1. YIT Participant Demographics

(N = 13; n = 8 Youthnet; n = 3 Olive Crest; n = 2 YouthCare)

| | **Youthnet** | **Olive Crest** | **YouthCare** | | | | |
|---|---|---|---|---|---|---|---|
| **Items** | | | | **Missing** | **Mean** | **Median** | **N** |
| **Sex**<br>**Male**<br>**Female**<br>Total percent | **4 M**<br>**4 F**<br>**n=8 (62%)** | **2 M**<br>**1 F**<br>**n=3 (23%)** | **2 M**<br>**n=2 (15%)** | **0** | **Males = 6** | | **(N = 13)** |
| **Age** | **16-19 years** | **15-18 years** | **17 years** | **0** | **16.8** | **17** | **(N =13)** |
| | | | | | | | |
| **Currently in FC/ Kinship Care (Yes, No)** | **(n= 5) FC (n=1 kinship (n=1) no** | **n=3 no** | **n=2 FC n=1 missing** | **1** | | | **n=7 (53.8%) FC n=1 (7.7%) Kinship n=4 (30.8%) Not in care currently n=1 (7.7%) missing** |
| **Current YIT seeking emancipation** | **(n=2)** | **(n=0)** | **(n =2)** | **0** | | | **n=30.8%** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Currently runaway seeking emancipation** | **(n=0)** | **(n=0)** | **(n=0)** | **0** | | | **(N=0)** |
| **Special accommodations needed** | **(n=0)** | **(n=0)** | **(n=0)** | | | | **(N=0)** |
| | | | | | | | |

# Appendix N

## Table 2. YIT Participant Post-Course Evaluation

| Item | Strongly Agree | Agree | Neither Agree or Disagree | Disagree | Strongly Disagree | Missing | Total |
|---|---|---|---|---|---|---|---|
| The location where my caseworker helped facilitate the online course was satisfactory. | **7(53.8%)** | **5 (38.5%)** | **1 (8 %)** | | | **0** | **13** |
| I had adequate time to complete the online course. | **8(61.5%)** | **5 (38.5%)** | | | | **0** | **13** |
| I was able to use the online course with no or few difficulties. | **5 (38.5%)** | **7(53.8%)** | **1(8%)** | | | **0** | **13** |
| The topics addressed in the course were relevant to me. | **6(46.2%)** | **5 (38.5%)** | **2 (15.4%)** | | | **0** | **13** |
| I realize the importance of general oral health better now than I did before the course. | **6(46.2%)** | **5 (38.5%)** | **2 (15.4%)** | | | **0** | **13** |
| This course made me more aware of the benefits of early recognition of dental diseases. | **8(61.5%)** | **5 (38.5%)** | | | | **0** | **13** |
| I understand more about how healthy eating habits can help prevent dental diseases. | **8(61.5%)** | **5 (38.5%)** | | | | **0** | **13** |
| I can improve my brushing and flossing techniques based on what I learned today in the online course. | **8(61.5%)** | **5 (38.5%)** | | | | **0** | **13** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| The course provided information that will help me find a dental office when I am on my own. | **8(61.5%)** | **5 (38.5%)** | | | | **0** | **13** |
| The course provided useful information about dental emergencies. | **7(53.8%)** | **6(46.2%)** | | | | **0** | **13** |

(N = 13)