The Period of PURPLE Crying®

A New Way To Understand Your Baby's Crying

2018

Guidebook for

Program Implementation and Management

National Center on
Shaken Baby Syndrome

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CHAPTER 1

INTRODUCTION AND PURPOSE

The National Center on Shaken Baby Syndrome (NCSBS) was given a challenge by their International Scientific Advisory Board to empirically test a shaken baby syndrome/abusive head trauma (SBS/AHT) prevention program that is effective and can be used in any jurisdiction or setting. The program hypothesis was in order to make a long term sustained reduction in the number of cases of shaken baby syndrome, there will need to be a cultural change in the way society understands:

1. The meaning of increased crying in early infancy
2. The dangers of shaking as a response to the frustration with crying

The *Period of PURPLE Crying*® program is continuously in development and improvement stages, building on over 30 years and dozens of studies on normal infant crying (click here for Research on Crying Bibliography); dozens of studies on physical consequences of shaking an infant (click here for references); three studies on crying curve connection to SBS curve[1,2] thirty- seven focus groups with parents in two countries; two randomized controlled trials with 4,400 participants in the U.S. and Canada that tested materials with parents[3,4] translations of the booklet and *PURPLE* video into 11 languages and close captioned and; parallel studies in North Carolina to reduce SBS/AHT (research complete) and British Columbia to reduce the incidence of SBS/AHT and infant abuse, in general (in progress).

In 2007, following encouraging results from two randomized controlled trials, the *Period of PURPLE Crying* program was made available for generalized use, which include a full color 10-page booklet and a DVD that includes the 10-minute *PURPLE* video. In 2012 the package was expanded to include a 17-minute video called *Crying, Soothing, and Coping: Doing What Comes Naturally™*. In 2015, the program was made available via a web and mobile app. The program materials are to be given at no charge to parents of new infants. The *PURPLE* program incorporates all of the important elements of an empirically tested prevention program, including validated materials with positive, meaningful messages for parents. The *PURPLE* program approaches SBS/AHT and infant physical abuse prevention by helping parents and caregivers understand the frustrating features of crying in healthy full-term infants that can lead to shaking or abuse.

The *PURPLE* program is designed to improve upon current best practices in two ways. First, prior to the *PURPLE* program, the best evidence for prevention[5] supported provision of materials during the maternity stay of mothers of newborns. The *PURPLE* program provides positive, evidence-based informational materials on newborn crying and normal development, rather than negative messages about not shaking their infant. Second, the *PURPLE* program includes two additional "doses." Dose Two is a reinforcement of the messages by public health, physician practices, and home visitor programs, or other similar organizations. Dose Three is a public education campaign to accomplish a cultural change within the general public about the normalcy of early

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[1]Barr, R.G. (1990). The normal crying curve: what do we really know? *Developmental Medicine and Child Neurology*, *32*(4), 356-362.
[2]Barr, R.G., Trent, R.B., & Cross, J. (2006). Age-related incidence curve of hospitalized Shaken Baby Syndrome cases: convergent evidence for crying as a trigger to shaking. *Child Abuse and Neglect*, *30*(1), 7-16.
[3] Barr, R., Rivara, & F., Barr, M., et al. (2009). Effectiveness of Educational Materials Designed to Change Knowledge and Behaviors Regarding Crying and Shaken-Baby Syndrome of Newborns: A Randomized, Controlled Trials. *Pediatrics*, *123*(3), 972-980.
[4] Barr, R.G,, Barr, M., Fujiwara, T., Conway, J., Catherine, N. &, Brant, R. (2009) Do educational materials change knowledge and behavior about crying and shaken baby syndrome? A randomized controlled trial. *CMAJ* 180(7), 727-733.
[5] Dias, M.S., Smith, K., deGuehery, K., Mazur, P., Veetai, L., & Shaffer, M. (2005). Preventing Abusive Head Trauma Among Infants and Young Children: A Hospital-Based, Parent Education Program. *Pediatrics 115*(4), e470-e477.

infant crying and the dangers of shaking or hurting a baby so that society in general (not just parents of newborns) can be aware of challenges faced by parents of newborns and be supportive.

The *PURPLE* program has been designed to be:

- Accepted and approved by pediatricians, public health nurses, child development experts, and parents
- Educational and attractive to parents of newborns
- Relevant for all parents while emphasizing the dangers of shaking a baby
- Clear, memorable, and meaningful with a positive message
- Presented at a grade 3 language level
- Representative of multicultural and various ethnic backgrounds
- Acceptable to public health and safe sleep standards; no bottles or blankets

The *PURPLE* program model requires that each family receive the materials in the hospital after their child's birth from a maternity nurse or within the first two weeks after the birth of the baby from another trained provider. Parents receive their own copy to take home so they can review the program when needed and share it with other caregivers.

The training for professionals that comes with the *PURPLE* program is comprehensive in that it includes several training options and is complementary to hospitals and organizations implementing the program. Training may be completed via:

1) Online training account at training.dontshake.org,
2) Internal Staff Education System,
3) Train the Trainer Webinar, and
4) Onsite training available for providers in the community who regularly meet with parents of newborns and reinforce important messages.

**Training opportunities 1-3 are provided at no cost by the NCSBS. The fourth training opportunity is usually provided by trainers in the jurisdiction where the program is being implemented. (Refer to Chapter 7, Program Materials and Training for more training information).*

The program also offers at no additional costs a variety of market-tested public education campaign tools, including but not limited to: print advertisements, billboard advertisements, bus back advertisements, website media, radio advertisements and television advertisements. Although these digital resources are complimentary, the user is responsible for the cost of placement and/or to obtain placement of this as a free public service announcement.

A parent website is also available and was designed specifically with the parent user in mind. It includes articles on infant crying, sleeping and soothing, information for fathers and male caretakers, and on self-regulation. All of the articles have been written expressly for parents by world renowned experts whose studies have been published in peer reviewed journals. Visit www.PURPLEcrying.info for more information.

Currently, the *PURPLE* program has been implemented in over 2,000 hospitals and organizations in 50 U.S. states, eight Canadian provinces (and one territory) as well as locations in Australia, Japan, North Korea, Israel, Cayman Islands and military installations across the world. Click here to view the Implementation Map to see where the *PURPLE* program has been implemented.

CHAPTER 2

RESEARCH AND DEVELOPMENT

Three Decades of Research

The *Period of PURPLE Crying®* is a concept developed by Ronald G. Barr, MDCM, FRCPC. Dr. Barr is a developmental pediatrician and Emeritus Professor of Pediatrics at the University of British Columbia. He was the Head of Developmental Neurosciences and Child Health Research at the Child and Family Research Institute (now British Columbia Children's Hospital Research Institute). He held the Canada Research Chair for Community Child Health Research (2003-2014). Dr. Barr is a member of the International Advisory Board of the National Center on Shaken Baby Syndrome. He has undertaken research on infant crying and early infant behaviors for over 30 years and is considered a world expert on the subject. Many other scientists worldwide have also contributed to the science on infant crying.

The following information shows how the rationale behind the concept of the *Period of PURPLE Crying* program is based on converging research. This program takes into account scientific sources of evidence about the normal development of infant crying.

Infant crying is the most common trigger for shaking or hurting an infant. Understanding normal crying phases of an infant can be used to prevent shaken baby syndrome/abusive head trauma (SBS/AHT) and infant physical abuse generally. There are three lines of evidence on which the program is based. The first is the compelling evidence that shaking a baby is an extremely dangerous behavior. We have known this for a long time and the evidence for this is continuing to accumulate. The second line of evidence is that, contrary to our past beliefs, increased crying--often called "colic" in the first few months of life--is a completely normal part of child development. Even though the evidence for this has accumulated over the past 30 years, it is often not well-described in pediatric textbooks or in much of the care giving advice literature.[1] The third line of evidence is the realization that early increased crying in normal healthy infants is the most common stimulus for SBS/AHT. This connection is what makes it possible to use our new understanding of the normality of early increased crying to prevent SBS/AHT.

The *PURPLE* program takes advantage of this well-established connection between normal crying and shaking to educate parents and the general public about normal crying behavior and the dangers of shaking. This goes beyond prior efforts to prevent shaken baby syndrome. First, it uses the virtually universal interest in infant crying as a normal developmental phenomenon to reach all caregivers. Many new parents would never consider themselves capable of shaking their baby and do not pay attention to warnings to "not shake," but *are* interested in learning about crying. Second, the program is much more acceptable to maternity and public health nurses who are very willing to share a positive message about crying and shaking, but reticent to present new mothers with a "negative" message simply about "not shaking." Third, it helps all supporters of parents, including health care professionals, relatives, transient caregivers and others to share this understanding. In short, this approach is an important supportive and developmental message about infants available to everyone, is more acceptable than other "don't shake the baby" prevention efforts, and should achieve much higher utilization than other available programs.

Parent Focus Groups 2004-2012

The National Center on Shaken Baby Syndrome (NCSBS), USA and Prevent SBS British Columbia (PSBSBC), Canada teams have conducted and coordinated extensive focus group testing on the *Period of PURPLE Crying*

program materials, the translation of these materials, the public education campaign and the *Crying, Soothing and Coping: Doing What Comes Naturally™* film.

United States Parent Focus Groups

In 2004, Dan Jones & Associates of Salt Lake City, Utah, USA were hired to conduct parent focus groups on the *Period of PURPLE Crying* program materials. There were six focus groups that included both male and female participants. The primary purpose of the groups was to determine if the initial *PURPLE* program materials resonated with the recipients, were easily understood, were meaningful and were of value to the parents.
A summary of the findings from these focus groups included:

- The message is simple and resonates with new parents. It "matches" the feelings associated with new parenting (specifically crying infants and the frustrations that go along with it).
- The DVD/booklet format and delivery are easily accepted;
- Viewers and readers appreciate the materials because the messengers are real people in real situations that contribute to the credibility of the message;
- Respondents report very few criticisms with the packet; none of the criticisms significant;
- Respondents say the components of the packet – video and booklet complement each other.
- The company reported that the program was the most positive program they had tested.

Request the full report at purple@dontshake.org.

Canadian Parent Focus Groups

In 2004, Prevent SBS British Columbia coordinated the evaluation of the *PURPLE* educational materials from the NCSBS for their suitability to Canadian culture. Samsara Communications was hired to facilitate the focus group process. Independently, MTM Research was hired to analyze the results and report the key findings. Participants in the groups included both males and females, were multicultural, and from a broad range of socioeconomic groups and races. The purpose of the focus groups was to determine if the initial *PURPLE* program materials resonated with the parents; were easily understood, were meaningful and of value.

A summary of the British Columbia findings were:

- The overall impression of the booklet was very positive. Participants found the messages to be informative, comforting, and concise. Important issues stood out. The *PURPLE* acronym was easy to understand. One participant reported that it was "comforting to know you are not alone." Another participant felt the information in the booklet was "just what you need to deal with the situation. [It] normalizes crying and offers alternatives about what to do;"
- Visually, participants found the booklet to be inviting and catchy. Everyone agreed that if they saw the booklet they would pick it up and read it;
- Participants correctly recalled that the "*Period of PURPLE Crying*" phrase describes normal infant crying. One participant said, "Colic is attached to everything, it is good that this is not." Another participant added, "[PURPLE] outlines the stages that you will go through and ensures that you will get through it… [there is a] light at the end of the tunnel."

Request the full report at purple@dontshake.org.

Randomized Controlled Trials

From 2005 – 2007, two large randomized controlled trials were conducted to test if the program could change knowledge and behavior of the participants when they were exposed to the English version of the updated *Period of PURPLE Crying* program materials. There were 4,400 parent participants in the two studies combined. The two separate studies were conducted in parallel in Seattle, Washington, USA and Vancouver, British Columbia, Canada. The principal investigator in the United States was Fred Rivera, MD, MPH, University of Washington, Seattle, Washington. The principal investigator for the B.C study was Ronald G. Barr, MA, MDCM, FRCPC, University of British Columbia. The Canadian research was funded by the British Columbia Ministry of Children and Family Development among others, and the United States research was funded by the Doris Duke Charitable Foundation and the George S. and Dolores Doré Eccles Foundation.

The research hypothesis was that the intervention materials would be effective in changing knowledge and behaviors relevant to the prevention of shaken baby syndrome. The materials were delivered to the participants by four methods: in Vancouver through public health nurse home visits and in Seattle through maternity wards, pediatricians' offices, and prenatal classes. The subjects were randomly assigned to an intervention arm where they received the *Period of PURPLE Crying* program materials (a 10-minute DVD and a 10-page booklet) or to a control arm where they received comparable information about general infant safety.

The studies were both completed in early 2007. Both studies found a statistically significant increase in the knowledge about normal infant crying. The USA study showed a statistically significant increase in understanding the dangers of shaking an infant. The Canadian study showed an increase in walk away behavior when the mother was frustrated. The Canadian and USA findings both reported statistically significant changes regarding the parent's behavior in that they were more willing to share the information with others. In Canada, information about infant crying, walking away if frustrated, and the dangers of shaking were more often shared; in the USA, information about walking away if frustrated and the dangers of shaking were more often shared.

A summary of the findings from both studies are as follows:

- Crying knowledge increased significantly;
- Increases ranged from +4.5 to +22% on crying knowledge scale questions;
- Parents in Vancouver who thought shaking was a "good" way to soothe an infant decreased by 63%;
- Walk away behavior increased by 74% in Vancouver; and
- Sharing information on crying, walking away, and dangers of shaking increased by 9%, 12% and 13% respectively in Vancouver.
- Sharing of information on walking away and dangers of shaking increased by 6.5% and 5.6% respectively in Seattle.7,8

7 Barr, R.G., Rivara, F., Barr, M., Cummings, P., Taylor, J., Lengua, L.J., Meredith-Benitz, E. (2009). Effectiveness of educational materials designed to change knowledge and behaviors regarding crying and shaken-baby syndrome of newborns: A randomized, controlled trials. *Pediatrics*. 123(3): 972-980.
The results of the research have been published in two prestigious, peer-reviewed journals: *Pediatrics* and the *Canadian Medical Association Journal*.

Effectiveness of Educational Materials to Prevent Shaken Baby Syndrome: A Replication of a Randomized Controlled Trial in Japan

Abstract: Infant crying is particularly frustrating to caregivers in the first few months of life and the most common trigger for shaking and abuse. The effectiveness of the *Period of PURPLE Crying* prevention materials (DVD and booklet) designed to increase knowledge and change behaviors related to crying and the dangers of shaking was reported in North America. The aim of this study was to replicate the effectiveness of the *PURPLE* materials with mothers of newborns in Japan.

Methods
In a randomized controlled trial, 201 parents received either *PURPLE* materials or analogous control materials on infant safety via mail within 2 weeks of birth. At 6 weeks, mothers completed a 4-day behavioral diary. At 2 months, participants completed a predefined 20-min structured telephone survey by an independent firm to assess knowledge and behavior.

Results
Scores on crying knowledge scales (out of 100) were significantly higher in the intervention than control groups (56.1 vs. 53.1; difference = 3.0, 95% confidence interval [CI]: 1.0–4.9, $p < 0.005$). Percentage of sharing of advice to walk away if frustrated by crying was significantly higher in the intervention than control groups (22.4% vs. 4.1%; difference = 18%, 95% CI: 7.4–29.1). Walking away during unsoothable crying was significantly higher in the intervention group than controls (0.085 vs. 0.017 events per day, rate ratio = 4.8, 95% CI: 1.1–21.2) by diary. Self-talk behavior scale (out of 100) tended to significance in the intervention group (16.6 vs. 8.9, difference = 7.7, 95% CI: −1.0 to 16.4, $p < 0.1$).

Conclusions
Crying knowledge, sharing of walk away information with others and walk away behavior when crying was unsoothable were higher for those who received intervention than control materials. The *Period of PURPLE Crying* materials may be useful in Japan as well as in North America for informing caregivers about the properties of infant crying and changing some behaviors related to infant crying and shaking.9 (UMIN Clinical Trials Registry register no. UMIN000001711.)

9 Fujiwara, T., Yamada, F., Okuyama, M., Kamimaki, I., Shikoro, N., Barr, R.G. (2012). Effectiveness of educational materials designed to change knowledge and behavior about crying and shaken baby syndrome: A replication of a randomized controlled trial in Japan. *Child Abuse & Neglect*. 36(9): 613-620.

Translations of the *Period of PURPLE Crying* Program

The *PURPLE* program is available in eleven languages and close captioned on the English version. The goals of the translation project for the *Period of PURPLE Crying* program were to insure the program was culturally sensitive, accurately translated and maintained the clarity and cohesiveness of the message.

The objective was to translate the program in the most professional way possible that would meet the criteria necessary for academic publishing and insure each language translated was exact and correct. The Provincial Language Services (PLS) were contracted to perform the translation process and procedures on many of the translations. The expertise of PLS in translations within the health care community was necessary and they offered a comprehensive service that included several translators and parents focus group procedures.
There were additional measures added to the routine process to ensure that the final product was the highest quality possible. First, an initial focus group made up of five to six qualified professional translators reviewed

and discussed the program materials in order to provide suggestions to the single primary translator regarding challenges and difficulties with various words and phrases. Second, after a translation was received from the primary translator, a unilingual focus group of parents reviewed the program in their language and adjustments were made based on their input. Thirdly, an English back translation was done by a separate translator with no previous knowledge of the program.

The process for all of the 11 languages included: 1) the interpreter focus group, and 2) the parent focus group; 3) one lead translator, 4) one back translator who translated the final version back into English to insure the integrity of the messages was maintained, and 5) a "resolution" session to decide on any inconsistencies between the forward and back translations.

Interpreter Focus Groups

The interpreter focus group included 5-6 participants who were certified interpreters currently working within the health care field. This group was held on the hospital campus and participants generally received the documents a week or two before the group. A bilingual facilitator led the group that included authors of the materials; Ronald G. Barr, MDCM, FRCPC, Head, Developmental Neurosciences and Child Health, and Marilyn Barr, Founder and Former Executive Director of the National Center on Shaken Baby Syndrome. The translator and coordinators for the *PURPLE* program team and the PLS were also present, but not directly part of the group. The facilitator followed guidelines provided by the PLS and based an equal amount of time on both the 10-page booklet and 10-minute film transcript. The focus groups were scheduled for two hours and the order of the materials was counterbalanced to provide equal coverage. The facilitator kept his/her own notes and provided a report with group suggestions.

Parent Focus Groups

The parent focus group participants were recruited by multicultural community agencies and the focus groups were usually held at the agencies. The criterion for recruitment was parents with children under two years of age with as little English as possible. This was not always appropriate, however, as in the Punjabi community it is customary for grandparents to be the primary caregivers so they were included in that particular focus group. Materials to be discussed were only reviewed in the target language. Coordinators from the *PURPLE* program team and the PLS were present to answer questions, but did not participate. The facilitator followed guidelines provided that was laid out in a similar manner as with the interpreter focus group. The group was given a choice at the end to view the English language version of the film and, depending on the level of English comprehension within the groups, it was sometimes shown. Again, the facilitator kept his/her own notes and provided a written report with group suggestions.

As an example, the Punjabi parent focus group general comments are below and most groups had similar impressions of the program.

Initial impressions:

- The information will be very useful and new;
- The focus group view of the script was that it made sense. One mom agreed that shaking a baby was dangerous and could lead to disabilities. Another mom said that one should have self control;
- The main message is perfectly conveyed in the DVD and is do not shake the baby.
- Shaking babies is not good;
- The main message about shaking infants is understandable;
- The group agreed with each other; and

- When probed as to why they get this message, one mom cited an example in the United States where somebody shook a baby when it wouldn't stop crying and the infant was handicapped. Another mom said that maybe the infant's neck muscles are weak so it can be a shock and dangerous.

Cultural relevancy:

- The group felt the *PURPLE* program materials were appropriate for the Punjabi community. The group wanted this DVD to be sent to India for people there to learn; and
- The group liked the translation except for 2-3 words that are dealt with in the page wise review.

Images:

- The images were well liked by the group and met expectations.

Translation focus groups will continue to occur with each new language chosen. To date, the program has been translated into the following languages: Cantonese, Punjabi, Spanish (Mexican and South American dialect), Korean, Vietnamese, Portuguese (including Brazilian dialect), French, Somali, Japanese, Arabic and Hebrew. The process described above was required for each of these languages to be translated.

Research Conducted on the *Period of PURPLE Crying* Prevention Program

The *Period of PURPLE Crying* Infant Abuse Prevention Program: A Parallel Evaluation

The *Period of PURPLE Crying* program, a rigorously tested and comprehensive SBS/AHT and infant abuse prevention program, has been and is being evaluated in parallel studies in the state of North Carolina (NC), 2007-2012 and also in the Canadian Province of British Columbia (BC), 2008- present, for its effectiveness at reducing shaken baby syndrome and infant abuse. These are the largest funded studies ever performed on a child abuse prevention program.

The North Carolina evaluation was funded through the Centers for Disease Control and Prevention, Doris Duke Charitable Foundation and the Duke Endowment. The British Columbia evaluation is funded by the BC Ministry of Children and Family Development and the BC Children's Hospital.

In both evaluations, a team comprised of researchers, academics, economists, doctors, social workers and nurses has worked to implement the program jurisdiction-wide following a three dose strategy. Beginning with birthing hospitals, the *PURPLE* program materials (10-minute film and 10-page booklet) have been provided along with an implementation protocol and fidelity agreement to every birthing hospital in the jurisdiction to deliver to parents and caregivers of each baby born.

Following implementation of the program in birthing hospitals, both teams began working on the second dose of the implementation strategy to reach and educate pediatricians, family physicians, public health nurses and first nations groups in BC, child and family services and other groups to reinforce the *PURPLE* program messages to parents and caregivers.

The third dose of the implementation strategy is a public education campaign including a variety of traditional, social and grassroots marketing and awareness efforts to reach the public generally with information about the *Period of PURPLE Crying* and with a goal of creating a cultural change. The most successful form of public education campaign in both jurisdictions was the *CLICK for Babies* campaign. (Refer to Chapter 6 for a description of the *CLICK* program).

Teams in NC and BC have successfully implemented the three dose strategy of the program. In BC, efforts continue to evaluate the program's effectiveness using process and outcome measures. In NC, the evaluation was completed in 2012 and the findings have been reported in two publications: JAMA Pediatrics and Nurse Education in Practice.

Summaries of Independent Research Conducted on the *PURPLE* Program

Period of PURPLE Crying Effective in Changing Knowledge and Behavior in a Home Visiting Program Supporting High Risk, First Time Mothers

Jill Bradshaw, Ph.D., conducted a comparative study for her doctoral dissertation at the University of Connecticut. She compared the SBS prevention program called the *Portrait of Promise* that consists of a DVD with the *Period of PURPLE Crying* program (booklet and DVD). The service sites were randomized and clients at each site were given one of these two programs to review.

Bradshaw, through collaboration with the Connecticut Children's Trust Fund and the Nurturing Families Network (NFN) Intensive Home Visiting program, enrolled 126 high-risk, first time mothers to participate in the study. Of the 126 mothers enrolled, 52% were Spanish speakers. A total of 92 mothers completed both pre and post test questionnaires. Spanish speaking mothers were provided pre and post test questionnaires in Spanish, watched the videos in Spanish, and had bi-lingual home visitors.

The *Portrait of Promise* program and the *Period of PURPLE Crying* program were evaluated for effectiveness across four dependent variables: 1) crying knowledge, 2) SBS knowledge, 3) behavioral responses to infant crying, and 4) sharing information with other caregivers.

Bradshaw's study found that the *Period of PURPLE Crying* program materials were shown to be statistically significantly more effective with both Spanish and English speaking mothers in improving three of the four variables measured; that is, crying knowledge, behavioral responses to infant crying and sharing information with other caregivers. The *PURPLE* program was shown to have little effect on increasing knowledge about SBS. However, pre-test scores showed that knowledge about SBS among those sampled was already high. By comparison, the *Portrait of Promise* video showed no statistically significant pre- to post-exposure improvements on any of the four variables evaluated in the study.

The *Period of PURPLE Crying* program materials were developed to be used as a universal prevention program; however, Bradshaw's study showed that the program was effective when used with high risk mothers. Bradshaw's study is important because it demonstrated that the *Period of PURPLE Crying* program materials were effective in changing knowledge and behaviors relevant to preventing SBS/AHT in a sample of high risk mothers.

10 Bradshaw, J. (2010). *Period of PURPLE Crying effective in changing knowledge and behavior in a home visiting program supporting high risk, first time mothers*. Retrieved from *ProQuest LLC*. (UMI 3415571).

Evaluation of *Period of PURPLE Crying* Media Campaign Messaging

Tailoring Hospitals' Education Materials for the *Period of PURPLE Crying: Keeping Babies Safe in North Carolina* Media Campaign

Dr. Heidi Hennink-Kaminski and Dr. Elizabeth Dougall, professors in the School of Journalism and Mass Communication at the University of North Carolina at Chapel Hill, published article in Social Marketing Quarterly

about the development and testing of messaging for the *Period of PURPLE Crying: Keeping Babies Safe in North Carolina* media campaign. Hennink-Kaminski and Dr. Dougall began by concept testing the existing *PURPLE* materials (10-minute video and 10-page booklet) with 10 non-parent caregiver focus groups to guide the development of the media campaign concepts and messaging. One of the goals of the campaign was to educate non-parents and the general public, as well as parents of infants.

Three key insights emerged from the focus groups that were then used to shape the concepts and messaging. The professional services of CAPSTRAT, a Raleigh-based strategic communication firm, were secured to narrow down the key insights into two creative campaign concepts: "Advice" and "Normal."

The ''Advice'' concept leveraged parent and caregiver experiences with unsolicited advice and used humor to capture attention and engage the target audience. The "Normal" concept leveraged attention and emotional connection with the target audience through dramatic images of caregivers frustrated with crying infants.

The two media campaign concepts were tested in three focus groups with 27 participants. It was discovered that an overwhelming majority of focus group participants preferred the "Normal" concept. Participants embraced the direct and self-explanatory nature of the message and the connection many shared with the emotional duress of trying to soothe a crying infant.

Feedback from the focus groups was used to refine the "Normal" campaign concept and to develop print and radio spots for use in the *Period of PURPLE Crying: Keeping Babies Safe in North Carolina* media campaign. The materials are included in the Dose Three: Public Education Toolkit for use in other jurisdictions implementing a media campaign.

11Hennink-Kaminski, H. J., & Dougall, E. K. (2009). Tailoring Hospital Education Materials for the *Period of PURPLE Crying*: Keeping Babies Safe in North Carolina Media Campaign. *Social Marketing Quarterly*, 15(4), 49-64.

Content Analysis of News Coverage of Shaken Baby Syndrome

Myths, Mysteries, and Monsters: When Shaken Babies Make the News

Dr. Heidi Hennink-Kaminski and Dr. Elizabeth Dougall, published another article in Social Marketing Quarterly on their findings of a qualitative content analysis of shaken baby syndrome (SBS) related news coverage from 1996 to 2007 that explores how broadcast and print news media categorize, frame, and source stories about SBS.

Dr. Hennink-Kaminski and Dr. Dougall used the Lexis Nexis Academic database to collect 170 broadcast news transcripts that contained the key words "shaken baby". Lexis Nexis and the NewsBank database were used to compile a list of 998 articles from the two highest circulating metropolitan newspapers in nine geographic regions. The 998 articles were randomly selected to yield a sample of 150 articles.

The analysis of news articles found that there were three major news types (*legal news, human interest profiles, and health news*) and three major frames (*SBS-in-question, shaking is serious, and cautionary tales*) that emerged. *Legal news* was the dominant story type for both broadcast and newspaper stories, followed by *human interest* for broadcast news and *health news* for newspapers. Broadcast news stories were more likely to have *SBS-in-question* as the dominant frame while newspaper articles were more likely to reflect the *shaking is serious* frame.

Legal experts were the sources most frequently used to construct SBS in news coverage, followed by medical experts, family of the victim, perpetrators, and members of law enforcement. Legal experts were more likely to be included as sources in television news reports than newspaper stories. Perpetrators and family members of the victim were more likely to appear in newspaper stories than television news reports.
Dr. Hennink-Kaminski and Dr. Dougall report that, while the legitimacy of SBS is widely acknowledged by child abuse experts and medical organizations in the United States, news reports typically frame SBS as a questionable diagnosis, the perpetrators as monsters, and the act of abuse as unpreventable. Thematic health coverage appeared least frequently of all story types, reflecting a criminal justice rather than public health approach to reporting about SBS.

The results of the review of news articles on SBS were used to determine best approaches to gaining valuable media coverage of the *Period of PURPLE Crying*: *Keeping Babies Safe in North Carolina* prevention program.

12 Hennink-Kaminski, H.J., Dougall, E. (2009). Myths, mysteries, and monsters: When shaken babies make the news. *Social Marketing Quarterly*. 15(4): 25-48.

Other Studies Published and Underway

Education about crying in normal infants is associated with a reduction in pediatric emergency room visits for crying complains

Objective:
The primary aim of this study was to determine whether there was any change in visits of 0- to 5-month old infants to the medical emergency room (MER) of a metropolitan pediatric hospital after province-wide implementation of a public health prevention program that teaches new parents about the properties of early crying in normal infants.

Methods:
Free-text descriptions of Presenting Complaint and Final Diagnosis on electronic MER clinic visit files were used to classify infants as cases of infant crying not due to disease. Annual crying case visits as a percent of MER visits were analyzed pre- and post-introduction of the prevention program.
Results:
Before the program, crying case visits represented 724 of 20,394 MER visits (3.5%). The age-specific pattern of MER visits for crying peaked at 6 weeks and was similar to the previously reported age-specific pattern of amounts of crying in the community. After program implementation, crying cases were reduced by 29.5% ($p < .001$). The most significant reductions were for crying visits in the first to third months of life.

Conclusion:
The findings imply that improved parental knowledge of the characteristics of normal crying secondary to a public health program may reduce MER use for crying complaints in the early months of life.

13 Barr, R. G., Rajabali, F., Aragon, M., Colbourne, M., & Brant, R. (2015). Education About Crying in Normal Infants Is Associated with a Reduction in Pediatric Emergency Room Visits for Crying Complaints. *Journal of Developmental & Behavioral Pediatrics*, 36(4), 252-257.

Maternal Frustration, emotional and behavioral responses to prolonged infant crying.

Prolonged inconsolable crying bouts in the first months of life are frustrating to parents and may lead to abuse. There is no empirical description of frustration trajectories during prolonged crying, nor of their emotional predictors or emotional and behavioural sequelae. Frustration responses and their relationships were explored

in an analogue cry listening paradigm. Without knowing how long it would last, 111 postpartum mothers were randomized to listen to a 10-min audiotape of infant crying or cooing while continuously recording frustration on a visual analogue 'slider' scale. The listening bout was preceded by questionnaires on negative mood, trait anger and empathy and followed by questionnaires on the reality of the cry sound, positive and negative emotions, soothing strategies, coping strategies and urges to comfort and flee. Individual frustration trajectories were modeled parametrically and characterized by frustration maximum, rate of rise, inflections and harmonicity parameters. As hypothesized, the modal response was of gradually increasing frustration throughout. However, there were marked individual differences in frustration trajectories. Negative mood, trait anger and empathy did not predict modal or modeled individual trajectories. However, frustration responses were significantly related to post-listening emotions and behavioural ratings. In particular, prolonged crying generated highly ambivalent positive and negative emotional responses. In summary, maternal frustration generally increased as the crying bout progressed; however, frustration trajectories were highly individual and emotional responses were highly ambivalent in terms of positive and negative emotions generated. Some emotional and behavioural responses were associated with specific trajectory parameters of frustration responses.

14 Barr, R. G., Fairbrother, N., Pauwels, J., Green, J., Chen, M., & Brant, R. (2014). Maternal frustration, emotional and behavioural responses to prolonged infant crying. Infant *Behavior and Development*, 37(4), 652-664.

Program Recognition

The *PURPLE* program has received recognition in articles and publications produced by a variety of national organizations, including but not limited to;

1. Agency for Healthcare Quality and Research
2. The California Evidence-Based Clearinghouse for Child Welfare
3. Center for the Study of Social Policy
4. Centers for Disease Control and Prevention
5. Child Welfare Information Gateway
6. National Children's Hospital Association

As outlined above, the program has been tested and evaluated over 10 years to ensure it is acceptable and attractive to parents, including; two parallel randomized controlled trials, peer review, sophisticated translation processes of languages, two effectiveness trials in North Carolina and the province of British Columbia and dozens of culturally diverse parent and professional focus groups.

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CHAPTER 3

IMPLEMENTATION OF THE *Period of PURPLE Crying*® PROGRAM- A THREE DOSE MODEL

The aim of the *Period of PURPLE Crying* program is to bring about a cultural change in attitudes and behavior about normal infant crying in parents and in society generally. The *PURPLE* program is designed to educate parents and others about the normal properties of early infant crying, and to reduce the stress and frustration parents experience when they have a baby who cries. The *PURPLE* program has been designed to change the way we understand early increased infant crying so that parents and caregivers will have reasonable expectations for their baby and for themselves as caregivers.

The National Center on Shaken Baby Syndrome (NCSBS) strongly recommends delivering the *Period of PURPLE Crying* program in accordance with the three dose approach. Dose One is the delivery of the program materials in maternity services or home visiting programs. Dose Two is the reinforcement of the *PURPLE* program messages by public health nurses, home visitors, pediatricians, family practice physicians, childcare providers, foster care workers, emergency room personnel and others who are serving parents of newborns. Dose Three consists of a public education campaign.

Dose One: Delivery is described in Chapter 4, Dose Two: Reinforcement in Chapter 5, and Dose Three: Public Education is described in Chapter 6. Program materials and staff training are described in detail in Chapter 7.

Bringing the *Period of PURPLE Crying* to your Institution

Implementing the *Period of PURPLE Crying* program at your organization can be accomplished in four steps:

1. Register for online training at training.dontshake.org and have all providers complete the "*Period of PURPLE Crying Training* for Implementation" online module;
2. Read and understand the Implementation Protocol;
3. Sign and return Fidelity Agreement to PURPLE@dontshake.org, and
4. Order program materials.

Pricing and Ordering Information

The NCSBS is the sole source provider of the *Period of PURPLE Crying* program materials. After a representative from your organization has registered for the online training and has signed/returned the Fidelity Agreement, the program materials can be purchased in any quantity over 100.

The cost of the *PURPLE* program materials will be offered at the following flat rates:

PURPLE Booklet + DVD: $2.30 per package for English, Spanish and French	*PURPLE* Booklet + DVD: $3.50 per package for All Other Languages	*PURPLE* Booklet + Web and App: $2.00 per package English, Spanish and French *New Mobile App (7/2018) is in English, Spanish in Fall 2018 and French in 2019

Ordering Methods:

- Call and place the order over the phone (801) 447-9360 ext. 1
- Email completed order form to PURPLE@dontshake.org or fax to (801) 447-9364
- To order online first register your organization and within 24 hours you will be validated as a *PURPLE* customer and will have access to the *PURPLE* online store.

Shipping:
All in-stock, non-personalized DVD/booklet orders are processed within 48 business hours. A shipping confirmation with tracking number is provided once an order is processed. PLEASE NOTE: Orders containing the *Period of PURPLE Crying* program web and mobile app package may take up to 7 business days to process.

Important Ordering Details:

- If this is your first-time order, please call the *PURPLE* staff to order.
- The NCSBS payment policy states that every order requires a purchase order (PO), credit card payment or check payment in advance (If you are paying via purchase order or check payment in advance, please contact the NCSBS for a quote before building the PO, as we charge exact shipping and these cost will vary)
- The minimum order requirement is 100 program materials.

Jurisdiction-wide Program and Initiative

Each jurisdiction-wide initiative and program is unique in and of themselves. Jurisdictions have their own imbedded cultures, policies, systems and resources. Consultation with the *PURPLE* program staff have proven to be the most effective way to explore and strategize the best fit for funding, implementation, community support, evaluation and sustainability. Through the consultation sessions, a program model and plan of action are designed with continued support from the *PURPLE* program staff.

Jurisdiction-wide Initiative
A Jurisdiction-wide Initiative is formed when a collective leadership team has been organized and is functioning with an expressed intent to implement the *Period of PURPLE Crying* program as their SBS/AHT and infant physical abuse prevention program in birthing hospitals and/or home visiting programs throughout the region. In consultation with the *PURPLE* program staff, the leadership team has explored options, chosen the *PURPLE* program and has developed a plan to work through implementation stages including, but not limited to, program installation, initial implementation, full operation, innovation and sustainability. The goal of the *PURPLE* program staff and jurisdiction-wide leadership team in this phase is to fully incorporate the comprehensive three dose *PURPLE* program model leading to increase knowledge for families in the community.

Jurisdiction-wide Program
A Jurisdiction-wide Program is formed when at least eighty percent of the region's annual births are provided with the *Period of PURPLE Crying* program materials from a trained provider. Dose Two: Reinforcement and Dose Three: Public Education are in process, under development or are intended to be incorporated into the jurisdiction's prevention program. A managed sustainability plan has been determined with two main components identified: 1) local capacity has been built to educate new parents and conduct follow-up; and 2) ongoing funding for the purchase of *PURPLE* program materials.

Please contact the *PURPLE* Program staff at 801-447-9360 ext. 1 or PURPLE@dontshake.org for questions about Jurisdiction-wide Programs, Initiatives or to schedule a consultation.

CHAPTER 4

DOSE ONE: Delivery of the *PURPLE* Program Materials to Parents

The *Period of PURPLE Crying®* program is given to families of new babies, both mothers and fathers, typically in the hospital or during a home visit after the birth of their baby. Each family receives their own copy of the program materials from a trained educator or provider. The tested program materials consist of a 10-page full color booklet and the 10-minute *PURPLE* video which come packaged together. The video is available in DVD or Web and Mobile App form. Providers use the booklet as talking points when presenting the materials to families. The parents should watch the *PURPLE* video during the initial delivery of the program, when possible, so they are able to ask the provider questions. Parents who want more advice about ways to soothe their baby can also watch a 17-minute video called *Crying, Soothing, and Coping: Doing What Comes Naturally™* that is also available on the DVD or Web and Mobile App.

The timing of the first Dose of the program needs to take place within the first two weeks of the baby's life before the baby's crying increases. For example, a maternity delivery setting is ideal because it is universal, meaning most babies are delivered at hospitals. Home visiting programs, pediatric well baby visits and public health, to name a few, have also been a good fit for Dose One. These health care professionals will need to receive training on the program's lines of evidence, research and development, which gives them the authority or expertise on the program prior to giving the materials to parents. Training for the *Period of PURPLE Crying* program implementation is complementary and conveniently available online. Hospitals or organizations need to register for the online training by completing the registration for *Period of PURPLE Crying* Program Training for Implementation form. (Refer to Chapter 7, Program Materials and Training for specific information about the training, implementation and online training modules).

It is very important that the parents receive the program from a person in a position of authority. It is equally important that the provider delivering the *PURPLE* program then recommends its use to the parent(s), encourages them to review the materials, and encourages them to share the materials with other caregivers of their baby. The parent(s) is far more likely to take the program seriously if this happens.

The *PURPLE* program uses this researched delivery method first tested by Mark Dias, MD. His model is described in his published article, "Preventing Head Trauma Among Infants and Young Children: A Hospital-Based, Parent Education Program" in *Pediatrics*[6]. The National Center on Shaken Baby Syndrome (NCSBS) strongly supports and advocates that the model described by Dr. Dias is used when giving the *PURPLE* program.

Delivery: Parent Presentation and Providing the Program Materials to Families:

In short, the following steps are ideal:

• Let parent(s) know you have the *Period of PURPLE Crying* materials to provide them including brief reading materials and two videos that will help them (and other caregivers) understand this normal infant development

[6] Dias, M.S., Smith, K., deGuehery, K., Mazur, P., Veetai, L., & Shaffer, M. (2005). Preventing Abusive Head Trauma Among Infants and Young Children: A Hospital-Based, Parent Education Program. *Pediatrics 115*(4), e470-e477.

period and the frustration associated with increased, prolonged crying periods; (Web and Mobile App with booklet or DVD with booklet package)
• For mobile/web app: Ask parent(s) if they would access the information on the web through a browser or download the app on their smart phone or tablet device by using their unique activation code for the discussion;

- **If this is NOT agreeable to parent(s), show them the app on your device or play through in-patient education system or on a DVD player.**
- For the DVD/booklet: open the package and show them the program materials;

• Go through the booklet, page by page, with parent(s) pointing out the important messages:

- *PURPLE* Acronym
- Early Increased Crying is Normal
- Ways to Comfort Your Crying Baby
- Important Action Steps
- Why Crying is Frustrating
- Why Shaking a Baby is Dangerous
- Be Sure to Tell others

• In a non-threatening way, ask parent(s) to describe in their own words what they think are the important *PURPLE* program messages (*TeachBack*)

• Tell parent(s) that there are two videos for the program. The first video is about the *Period of PURPLE Crying* and the second video offers specific ways to soothe their baby and coping strategies

• The *PURPLE* program video should be shown to the parents, whenever possible, following the booklet delivery presentation

• Provide the *PURPLE* program materials and encourage them to review the materials again and to share the information with others who cares for their baby

- The activation code for the web and mobile app can be used on up to five personal devices and is available for eighteen months after activation. (you may have already shared this if parent(s) agreed to download in the beginning)

• Allow an opportunity for questions

*It is recommended that the professional(s) teaching about the program use the *TeachBack* model that asks the parent to repeat back what they believe the messages are. This way the person delivering the materials knows if the parent(s) have really understood the correct messages.

- **Classes for parents** held in the postnatal department can be offered; however, if these are optional, in some hospitals poor attendance can occur. An advantage of classes is that presenters can take the time to organize a longer version of the program, answer questions during the class and show the video. The NCSBS has complementary visual aids for these class situations. Additional materials for demonstration purposes are available for purchase through the NCSBS including a life size doll and an audio CD of infant crying.

• **Prenatal classes** are another way to present the information to parents. This allows for a longer presentation too; however, it must be noted that often only a small percentage of parents attend prenatal classes and many are first time parents. Therefore, this method is helpful but not universal and it is better to use it as an enhancement option rather than the only method of distribution.

The tested model requires that the parent(s) of a new infant receives their own set of program materials: either Web and Mobile App with booklet or DVD with booklet package. There are some very good reasons why the *Period of PURPLE Crying* program makes this requirement. For instance, when parents initially receive the materials, they may not realize how relevant they are until after when their baby is actually going through the *Period of PURPLE Crying*. They will want and need to review the content again. It is understood that people learn in different ways, some through reading and some through viewing a video. The *PURPLE* program messages are given in both video and written formats to address learning style differences. Additionally, parents who have the *PURPLE* program materials can easily share the materials with others who may be caring for their baby rather than attempting to transmit the content of the program themselves. Often it is far easier for a parent to tell a temporary caregiver to watch the 10-minute *PURPLE* video or read the 10-page booklet than try to explain it themselves; while telling the caregiver is the ideal method, this is sometimes difficult for some parents to do. This gives the parent(s) a way to educate their other caregivers in a simple and easy way. Since many babies are shaken by temporary caregivers, it is critical these people receive the program in addition to parents.

It is critically important that consistent, clear and correct (evidence-based) messages are given to parents and the public. The *PURPLE* program is committed to offering only information that meets this criterion. The tested program will not be effective if those delivering the program create their own version of the presentations or change the training materials in any way. Further, the *Period of PURPLE Crying* program materials should not be distributed with other educational materials that express a non evidenced-based, conflicting message (e.g. all infant crying can be soothed if only parents respond in the correct way).

(Refer to Chapter 3 for information on implementing the *Period of PURPLE Crying* program at your hospital or organization).

CHAPTER 5

DOSE TWO: Reinforcing the Message

In addition to Dose One: Delivery of the *PURPLE* program materials to the parents of newborns, it is also important to have other organizations reinforce the *Period of PURPLE Crying*® program messages within the community. Public health nurses, home visitors, pediatricians, family doctors or public health clinics should reinforce the message by talking to parents about the concepts taught in the *Period of PURPLE Crying* program, such as, "babies can still be healthy and normal even if they cry five hours per day" and the "the crying will come to an end." Dose Two is a little more flexible in terms of timing than Dose One: Delivery, generally occurring throughout the first three months following the baby's birth. If needed, the person of authority should provide materials to parents who were missed and did not receive the *PURPLE* program materials at the hospital after having their baby. It is important not to duplicate the materials in the distribution process as, ideally, most parents should have received the materials at their birthing hospital. If the program materials are not being distributed through the hospital then home visiting, prenatal and postnatal programs and/or public health departments are ideal for Dose One if they have contact with the parents within the first two-weeks after the baby is born. These health care professionals need to comply with the Dose One training and distribution requirements that the maternity nurses use, outlined in Chapter 3.

Other groups who serve parents should be specifically targeted to facilitate complete community coverage about the *Period of PURPLE Crying* program messages. Pediatricians, family practice physicians, childcare providers, foster care workers, midwives, nurse help line personnel, hot line personnel, emergency room personnel and others serving parents should be given the opportunity to receive training on the *Period of PURPLE Crying* program. This will ensure that the parents get the same information wherever they go for help and advice.

Delivery: Reminding parents about program messages and resources.
In short, the following steps are ideal:

Ask parent(s) if they received the *PURPLE* materials and education after the birth of their baby;

a. If parent(s) responds, "yes", continue into Dose Two reinforcement.
b. If parent responds, "no", follow the Dose One delivery described above.

Remind parents:

- Infant crying is normal in the first 4-5 months.
- Crying increases at about 2 weeks, peaks at 2-3 months and declines by 5 months.
- Some normal babies may cry as long as 5 hours a day, some less.
- Call your doctor if you are worried about the crying.
- Shaking is very dangerous, can cause brain damage and even death.
- If the crying becomes too frustrating, put your infant in a safe place, walk away and take a break for 5-10 minutes. And remember, the second video provided offers advice about ways to soothe your baby.
- Be sure to tell everyone who cares for your infant about the *Period of PURPLE Crying* program.

Dose Two: Downloadable and Printable Resources

Community Flyer

The Community Flyer has been designed to help reinforce the *Period of PURPLE Crying* program messages in the community. The flyer can be distributed by agencies conducting Dose Two: Reinforcement activities. It is designed to be displayed where community members can learn more about the *PURPLE* program materials and normal infant crying and soothing. The flyer is complimentary and downloadable from the online module under the Additional Downloads - Dose Two or upon request from NCSBS *PURPLE* program staff. The flyer is available in English and Spanish and in two size options: 8.5 x 11 full page flyer or a 5.5 x 4.25 half-page flyer.

Dose Two: Reinforcement Information Card

The Reinforcement Card can be used by organizations in the community who are providing Dose Two reinforcement. It reminds parents about the *Period of PURPLE Crying* and encourages them to review the *PURPLE* video and booklet they received in the hospital. The card also asks parents to share the program materials with anyone who cares for their baby. In the case where parents did not receive their own copy of the program materials; has lost it or gave it to someone, the card has a space where the birthing hospital or organization can fill in a phone number so parents can call to obtain another or their own copy of the materials. The Reinforcement Card is 9 x 6 inches in size and can be sent in the mail or handed to parents in person. The card is available in English and is downloadable from the online training module under the Additional Downloads - Dose Two section or upon request from *PURPLE* program staff.

Reminder Postcard

The Reminder Postcard reminds parents about the *Period of PURPLE Crying* and encourages them to review the program materials that they received in the hospital. The card is most commonly used to email, or mail to parents when the baby is close to 2-months of age and likely at the peak of crying. The card also asks parents to share the program materials with anyone who cares for their baby. The Reminder Postcard is available in English and Spanish. The card template is downloadable from the online training module under the Additional Downloads - Dose Two section or upon request from *PURPLE* program staff.

Reminder Poster

The Reminder Poster has been designed to be hung in organizations where parents of newborns may visit. This poster reminds parents about the program materials they received in the hospital and the need to share this information with anyone who cares for their child. The poster is 11 x 17 inches and is free and downloadable from the online training module under the Additional Downloads - Dose Two section or upon request from *PURPLE* program staff. The poster is available in four languages: English, French, Spanish, or English and Spanish and with either Caucasian or African American parents.

***PURPLE* Acronym and Crying Curve Card**

The *PURPLE* Acronym and Crying Curve Card is double sided with the acronym on the front side and the crying curve on the back side. This card was designed to be used as a teaching tool for providers. While the provider is reinforcing the key program messages, the card gives parents a visual reminder of these key points. The *PURPLE* Acronym and Crying Curve card is free and downloadable from the online training module under the Additional Downloads – Dose Two section or upon request from the *PURPLE* staff. The card is available in English and Spanish.

CHAPTER 6

DOSE THREE: PUBLIC EDUCATION CAMPAIGN

A public education campaign provides this information to everyone, and especially to all those who did not receive it through the previous two methods. This is an important part of bringing about a cultural change in our understanding of the normality of early increased crying, as it is necessary to educate grandmothers, temporary caregivers, boyfriends, neighbors and relatives about the *Period of PURPLE Crying*. Understanding of the *Period of PURPLE Crying* among the general population can help ease the stress, and even criticism, of parents dealing with the inconsolable crying of their babies. It also enables mothers and fathers to receive support and reinforcement from those who understand the *Period of PURPLE Crying* concept. A public education campaign, including ads and a user's guide, downloadable at no cost, are available from the NCSBS to those communities implementing the *PURPLE* program in their jurisdiction.

"Normal" [infant crying] Advertisement Campaign

The *Normal Campaign* resources are available for use for a public education campaign. These were adapted from a campaign that was developed and tested in North Carolina while conducting research on the *PURPLE Crying* program titled *Keeping Babies Safe in North Carolina*. (Refer to page 11 for a summary on the *Period of PURPLE Crying*: *Keeping Babies Safe in North Carolina*-2007-2012).

When the North Carolina campaign was used however, additional tools needed to be created and tested for this advertising campaign for two reasons. First, the target audience for the media campaign in North Carolina extended beyond the parents of newborns to include future parents, friends and family members. As a result, the *PURPLE* program messages that were developed and tested with parent audiences needed tailoring for use with other target audiences to accomplish the goals of the program. Creating infant crying messages that will be salient to non-parents, as well as parent audiences is a challenge, but also essential to influencing knowledge about infant crying and shaking behavior. Secondly, advertising messages need to be more compact than the 10-minute *PURPLE* video and 10-page booklet formats. Translating this information into a format that can quickly grab attention and break through the clutter of other media messages was critical.

To accomplish this, a three-stage process was developed. In the first step, 10 focus groups comprised of 84 North Carolina residents were conducted to test the *PURPLE Crying* concept and identify which messages and images from the video and booklet were most resonant. Significantly, participants were surprised to learn about the normalcy of prolonged infant crying, embraced the *PURPLE Crying* label, and were keen to share this new knowledge with others. The volume and usefulness of advice new parents received emerged as an important issue, and participants also suggested a range of channels through which to reach non-parent caregivers, and friends and family members.

In response to the focus group findings, five broad approaches were developed and discussed with the *PURPLE* program leadership team. From those discussions, two campaign concepts, "Advice" and "Normal" emerged. Three print ads, a storyboard, and a website home page for each concept were developed and tested via three focus groups and 60 intercept surveys conducted across North Carolina.

The "Normal" campaign, which positions infant crying as a normal developmental stage rather than an indication of caregiver incompetence or of an unhealthy child, was selected and refined based on participant feedback. A criterion for model casting was established: (1) a multi-racial looking mother; (2) a child within the appropriate age range; and (3) preferably a real-life mother/child pairing. Two mother/child model teams were identified as meeting the criteria and photos were circulated for review and comment by the leadership team. A mother/child team was selected and scheduled for the photo shoot. The final "Normal" print ad underwent final message-testing using intercept surveys.

"Advice" Campaign Print Ad

"Normal" Campaign Print Ad

Once the print concept was finalized, development of the radio spots began. A 60-second and 30-second radio script was developed and tested with members of the *PURPLE* program leadership team. Voice talent casting began and several announcer/mother pairings were identified and demo tapes were distributed for review and comment by the leadership team. Voice talent selections were made and the 60- and 30-second radio spots were produced with a North Carolina version and a generic version.

The advertising campaign development team consisted of Heidi Hennink-Kaminski, PhD and Elizabeth Dougall, PhD, both professors in the School of Journalism and Mass Communication at the University of North Carolina at Chapel Hill, and Lindsey Bennett, VP Associate Creative Director at CAPSTRAT, a Raleigh-based strategic communication firm. Members of the North Carolina and National Leadership team provided invaluable direction throughout the entire process. It is important to point the lengthy and comprehensive process this ad campaign took to develop the final advertisement. This is an example of the types of sophisticated processes the NCSBS takes with all of the media materials and videos they produce.

Public Education Campaign Resources

The NCSBS provides resources to those organizations that have implemented the *Period of PURPLE Crying* program in their jurisdiction and are interested in carrying out the Dose Three: Public Education Campaign. The ideas, advertisements and resources for the campaign are available at no cost; however, the organization is

responsible for the cost of printing the advertisements, airing PSA, organizing events, and other related costs. The components listed below are part of a media tool kit with additional items continuously being added as developed:

- *Normal* [infant crying] Print Advertisement (various sizes);
- 30-Second Radio Announcement;
- 60-Second Radio Announcement;
- Outdoor Advertisements (Billboards, Bus Ads, etc.);
- 5-, 10- and 30-Second Television PSA.
- Web graphics
- *PURPLE Crying* Graphic Assets (logo, acronym, etc.)
- Press Releases and Case Studies

***Period of PURPLE Crying* Program Toolkit**

The *Period of PURPLE Crying* Program Toolkit is an online resource that contains print and broadcast ready files available for use with an organization's *PURPLE* program public education campaign. The Toolkit features a user-friendly interface where the ad files can be previewed online and are available for immediate download.

The Toolkit can be accessed at https://dontshake.org/purple-toolkit

Print and Outdoor Advertisements

Print-ready ads for magazines, newspapers, billboards, bus shelters, and the like are included in the Toolkit in both full color and black and white versions as well as in several different sizes to accommodate organization(s) needs.

Personalization of Advertisements

Print and outdoor ads may be customized to include up to two of the sponsoring organization(s) logos. Manipulation of the files provided in any way other than the addition of logos is prohibited. Logos may be added only in the area specified on the print-ready file. In order to maintain consistency and not compromise the design, the NCSBS suggests applying sponsoring organization(s) logo(s) in a white to a light gray color as color logos often conflict with the unique color scheme used in the ads. If the graphics standards for your logo are in disagreement with this request, please contact the *PURPLE* Team at PURPLE@dontshake.org.

Logos Added in Box Place

Logo Added in Light

Organizations who wish to add a sponsoring organization(s) logo(s) to a print or outdoor ad but do not have the capability may request the support of the *PURPLE* Team at PURPLE@dontshake.org. The NCSBS can insert logos into an existing ad and can provide support to resize or manipulate ads to custom specifications. The NCSBS charges a minimal personalization setup fee per ad for these services.

NCSBS Approval of Personalized Advertisements

The NCSBS requires final approval of any personalized ad(s) prior to files being sent to the advertising medium. This approval is requested in order to assure that the ad(s) meets the NCSBS graphic and branding standards. Ads should be sent to the *PURPLE* Team at PURPLE@dontshake.org. The NCSBS will respond within 48 business hours to either approve or suggest any revisions that may be required in order to meet NCSBS graphic and branding standards.

Adding New Advertisements to the *PURPLE* Toolkit Library

Newly created print and outdoor ads that are produced to specifications not already contained in the *Period of PURPLE Crying* Program Toolkit may be added to the Toolkit at the NCSBS' discretion. The NCSBS does not require consent of other parties to include the new developments in the Toolkit.

<u>Radio Advertisements</u>

The *PURPLE* Program Toolkit contains radio ads in .mp3 format for use in a public education campaign. Manipulation of these files into a format other than .mp3 is the responsibility of the user and may be done with written consent from the NCSBS.

Personalization of Radio Advertisements

Sponsoring organizations may be recognized by recording a tag line ("brought to you by…, sponsored by…" etc.) onto the end of the ad or through on-air recognition by the radio personality. The NCSBS does not possess the resources to assist organizations in recording, so recording of tag lines is the responsibility of the user.

NCSBS Approval of Personalized Advertisements

The NCSBS requires final approval of any personalized ad(s) prior to broadcasting. This approval is requested in order to assure that the ad(s) meets the NCSBS branding standards. Ads should be sent to the *PURPLE* Team at PURPLE@dontshake.org. The NCSBS will respond within one business day to either approve or suggest any revisions that may be required in order to meet branding standards.

<u>Television Advertisements</u>

The NCSBS developed a series of television commercials to support the *PURPLE* program public education campaign. The television commercials were professionally produced in high definition and are available in 10-, 15- and 30-second spots.

Requesting a Television Advertisement Master

The high definition television ads comprise an extremely large file making it difficult to transfer to an organization via the internet. Also, most television studios require the master disc in order to reproduce a high quality television advertisement. With these qualifications in mind, an organization may request the television advertisement master disc with the following conditions:

- Requesting organization provides a credit card number or sends a $100 fully refundable deposit prior to the NCSBS mailing the master disc; and
- Requesting organization returns the master disc to the NCSBS following completion of the reproduction of the television advertisement. (The NCSBS will then refund the $100 deposit).

To request the television advertisement master disc, please contact the *PURPLE* Team at PURPLE@dontshake.org.

Personalization of Television Advertisements

Print and outdoor ads may be customized to include up to two (2) of the sponsoring organization(s) logos. The television ads contain a scene at the end of the video where logos may be added. Manipulation of the files provided in any way other than the addition of logos is prohibited. Logos may be added only during this scene.

Up to two (2) logos may be added in this

NCSBS Approval of Personalized Advertisements

The NCSBS requires final approval of any personalized television ad(s) prior to files being sent to the advertising medium for broadcast. This approval is requested in order to assure that the ad(s) meets the NCSBS graphic and branding standards. Ads should be sent to the *PURPLE* Team at PURPLE@dontshake.org. The NCSBS will respond within 48 business hours to either approve or suggest any revisions that may be required in order to meet NCSBS graphic and branding standards.

Theater and Other Advertisements

The NCSBS has developed advertisements for many other mediums and events such as ads that display at movie theaters prior to the start of a movie, community handouts and bus backs. These ads are available for download through the *Period of PURPLE Crying* Program Toolkit and adhere to the same personalization and approval policies as the print and television ads. Up to two (2) logos from sponsoring organizations are allowed in specified locations, and the NCSBS requires final approval prior to files being sent to the advertising medium to ensure proper NCSBS branding and graphic standards.

New Advertising Channels

The NCSBS recognizes the swift-moving field of marketing and advertising and the need to develop new materials to accommodate these changes. With this in mind, the NCSBS is happy to listen to ideas our partners and sponsoring organizations may have to support a *PURPLE* program public education campaign that would require the use of the "Normal" concept and/or *PURPLE* program concepts and images.

For example, the movie theater ads and elevator wraps were developed in conjunction with our partners at London Health Sciences Center in London, Ontario and St. Luke's Hospital in Cedar Rapids, Iowa respectively. The NCSBS asks that advertisements for new channels not already included in the *PURPLE* Toolkit be produced in collaboration with the NCSBS to assure adherence to NCSBS branding and graphic standards.

Press Releases and New Articles

The *PURPLE* Toolkit includes several press releases and articles that have been published to local and national newspapers to serve as examples of stories that appeal to the media. These press releases contain information on how to introduce and discuss the *Period of PURPLE Crying* program concepts and how to apply them to your organization's *PURPLE* program. The press releases cover a variety of topics including initial implementation of the *PURPLE* program into area hospitals, announcements of events designed to promote the *PURPLE* program (example: press conferences, award ceremonies, and the like), and responses to studies concerning prevention and shaken baby syndrome.

The *PURPLE* Toolkit also contains templates for your assistance in creating a press release or an opinion editorial (Op-Ed). These templates describe some of the key talking points concerning the *Period of PURPLE Crying* concepts and shaken baby syndrome/abusive head trauma (SBS/AHT). The templates also provide some direction in how to incorporate your organizational goals and programs within the context of the *PURPLE* program and SBS/AHT prevention in order to promote your organization and its contribution to the community.

CLICK for Babies

CLICK for Babies: Period of PURPLE Crying Caps Campaign is a grassroots public education initiative organized and sponsored by the NCSBS to build awareness of the *Period of PURPLE Crying* program. Through partnerships with invited jurisdictions who deliver the *PURPLE* program, knitters and those who crochet are recruited to craft purple colored baby caps. Caps are collected by organizers in each jurisdiction and distributed alongside the *PURPLE Crying* program in the months of November and December to hospitals and/or public health units.

CLICK for Babies is a growing annual, international campaign. The primary goal of the campaign is to generate increased awareness of the *Period of PURPLE Crying* program, namely normal infant crying and the dangers of shaking an infant. Much of the awareness and conversation that takes place about *CLICK for Babies* happens through social media. Using a variety of social media forums, knitters are recruited to help knit caps for the campaign, stories are shared, photos and videos from events are posted and conversations about the *Period of PURPLE Crying* program take place. Social media is the mechanism in which the campaign has been able to go viral.

Jurisdictions invited to participate in the campaign are responsible for all aspects of knitter recruitment, promotions, hospital buy-ins, and cap logistics. The NCSBS provides support and is responsible for providing resources and materials for marketing and PR, host and updating the website, promoting the campaign via social media engagement, and cap logistics and distribution from sources outside local jurisdictions. To be invited to participate in the *CLICK for Babies* campaign, you must be delivering the *Period of PURPLE Crying* program jurisdiction wide (county, geographical region, state), have a team capable of organizing and coordinating the campaign, be willing to collect, tag, store and distribute crafted caps to hospitals, and agree to adhere to the guidelines and protocol for the initiative.

Starting in 2018, the NCSBS will offer all implemented organizations interested in participating in the delivery of caps with program materials to families a requested amount of our extra caps. Ongoing delivery in subsequent years will be determined by the amount of donated caps the NCSBS receives each campaign year.

To learn more about the CLICK for Babies campaign visit the website, CLICKforbabies.org or contact the CLICK for Babies team at PURPLE@dontshake.org / 801-447-9360.

Chapter 7

PROGRAM MATERIALS AND TRAINING

Program Materials

The program materials include either:

Booklet + DVD

- Available in 11 languages
- Full color 10-page booklet
- Parent Reminder Card
- DVD including:
  - 10-minute *PURPLE Crying* video
  - 17-minute *Crying, Soothing, Coping: Doing What Comes Naturally* video

Booklet + Web and Mobile App

- Web available in English, Spanish and French
- Full color 10-page booklet
- Parent Reminder Card
- Web and mobile app including:
  - 10-minute *PURPLE Crying* video
  - 17-minute *Crying, Soothing, Coping: Doing What Comes Naturally* video
  - 10-page e-booklet

***New mobile app available in July 2018 in English, Fall 2018 in Spanish and French in 2019.**

The program materials are educational and attractive to parents of newborns; contain clear, memorable, meaningful, attractive, positive messages; are written at a third grade reading level; intended to be multicultural both through translation and the visuals. The materials are in compliance with public health and safe sleep standards for example: no bottles, blankets, bumper pads, drop down-side cribs or toys in the bed. The *PURPLE* program materials are provided free of charge to parents (cost of the program materials are covered by the organization delivering the program) so that parents have their own materials to review when needed and share with others who may care for their baby.

The Reminder Card is a 5x7 inch card located inside the English, Spanish and French booklets. Its purpose is to give parents tips on what to do if they become frustrated with their baby's crying. On the back of the reminder card, there is a space that allows caregivers to write down important phone numbers. The Reminder Card is designed to be removed from the booklet and hung in a prominent area such as a refrigerator or the wall of a baby's nursery. It also serves as a reminder to review the *PURPLE* program materials.

*The Reminder Card can be personalized with a hospital or organization's logo. (Refer to Chapter 9, Purchasing and Shipping for information on personalizing materials for your hospital or organization).

The program materials also include a 17-minute video called *Crying, Soothing, and Coping: Doing What Comes Naturally™*. This video was developed in partnership with Dr. Ronald Barr who reviewed the literature on infant soothing and emotion regulation to develop a video that provides realistic soothing strategies. This video also addresses soothing that might not work and includes real stories from real parents about their experiences, successes and failures with infant soothing and coping. The National Center on Shaken Baby Syndrome (NCSBS) contracted with two award winning video production firms to produce the 17-minute high definition video. It is in compliance with public health and safe sleep standards. It was reviewed by seven professionally moderated parent focus groups in the United States and Canada including two groups of nurses and public health professionals, one fathers group, two mothers groups and two mothers and fathers' together groups. The video is available in English, Spanish and French and is closed captioned for the hearing impaired.

The *Crying, Soothing, and Coping* video:

- gives caregivers a list of evidence-based techniques to help them soothe a crying infant
- is in compliance with all safe sleep and public health safety standards
- reminds all caregivers what works one day may not the next and this is normal and okay
- encourages parents to take time for themselves
- assures them the crying will come to an end; and is
- told by an infant crying expert and real parents' experiences

Languages

The *PURPLE* program's booklet and DVD is available in 11 languages:

- English
- Spanish
- Arabic
- Cantonese
- Punjabi
- French
- Vietnamese
- Somali
- Korean
- Japanese
- Portuguese

The second video on the DVD: *Crying, Soothing, and Coping: Doing What Comes Naturally*, is available in English, Spanish, and French. As such the NCSBS offers two versions when ordering English; 1) an American version: including both videos in English and Spanish, and 2) a Canadian version: including both videos in English and French. If there are questions about any of the other eight languages, please contact the NCSBS.

The *PURPLE* program's booklet and web app is available in 3 languages:

- English
- Spanish
- French

The full color 10-page booklet with the web (downloaded at purplecryingapp.info) app activation code can be ordered in English, Spanish, or French. The booklets will include a unique activation code for parents to use and share on up to five devices, and each family should receive their own booklet with unique activation code. Web

app users will be able to choose between English, Spanish, or French as their preferred language when they open the web app.

***New mobile app available in July 2018 in English, Fall 2018 in Spanish and French in 2019.**

The translation process has been completed with the most scientific and sophisticated process possible. These are not subtitles, but overlay talking in the video. Review Chapter Two for more information on the translation process.

Period of PURPLE Crying **Program 2012 Updates**

The *Period of PURPLE Crying* program's 10-minute video's B-roll or background footage was updated to reflect current public health and safe sleep standards. The footage was filmed in high definition with updated graphics and features a diverse cast of caregivers, infants and their siblings. Male caregivers are featured more prominently in the new footage, and a family of twins was included to highlight the difficulties of caring for multiple infants.

Period of PURPLE Crying Program 2015 Updates

In 2015, the National Center on Shaken Baby Syndrome launched a web and mobile app for the *Period of PURPLE Crying* program. The web and mobile app is a new, modern solution to provide parents and caregivers important education about normal infant crying, strategies to soothe a crying baby and tips to cope when soothing that doesn't work. The new web and mobile app presents a unique opportunity to reach families and prevent abuse because the program is now accessible from any smartphone, tablet or desktop computer. This ensures that parents have access to this important education quickly, easily and from virtually any location.

Period of PURPLE Crying Program 2018 Updates

In July 2018, the National Center on Shaken Baby Syndrome launched a new, updated version of the **mobile** app (not web app @ purplecryingapp.info – this remains the same) for the *Period of PURPLE Crying* program. The **mobile** app is a new, modern application to provide parents and caregivers not only with the important education about normal infant crying, strategies to soothe a crying baby and tips to cope when soothing that doesn't work, but it also is more interactive to include a baby tracker that allows parents to monitor their baby's crying, sleeping, feeding and growth, amongst other new features.

Training for Implementation

The Training for Implementation is the main training component of the *Period of PURPLE Crying* program and provides the background and rationale behind the program. All providers delivering the program to parents need to view the narrated training presentation in order to understand the program's lines of evidence, research and development, and give them the authority or expertise on the program.

Online Complimentary Training Modules

The *Period of PURPLE Crying* program comes with complimentary online training for organizations that are delivering and reinforcing the *PURPLE* program messages to parents. This course called "*Period of PURPLE Crying Training for Implementation*" will educate and prepare providers to deliver the evidence-based *Period of PURPLE Crying* education and materials to parents. The course contains 3 mandatory lessons and a quiz assessment that

will take approximately 1 hour to complete. At the completion of this course, providers should feel confident in delivering the *Period of PURPLE Crying* program to families and answering their questions.

The lessons included in this course are:

1. *Period of PURPLE Crying* video
2. *Period of PURPLE Crying* booklet
3. *Crying, Soothing, Coping: Doing What Comes Naturally video*
4. *Lines of evidence and rationale for the Period of PURPLE Crying presentation*
5. How to Access the *PURPLE* Program App

Lessons one (1), two (2) and four (4) are training requirements. Lesson three (3) and five (5) are highly recommended.

Additional resources are available for download including but not limited to: Program Overview, 3- Minute Talking Points, 10- Minute Talking Points, Reinforcement Talking Points, FAQs for Professionals, and FAQs for parents, NICU letter, Implementation Checklist, Fidelity Agreement, and copyright permission forms.

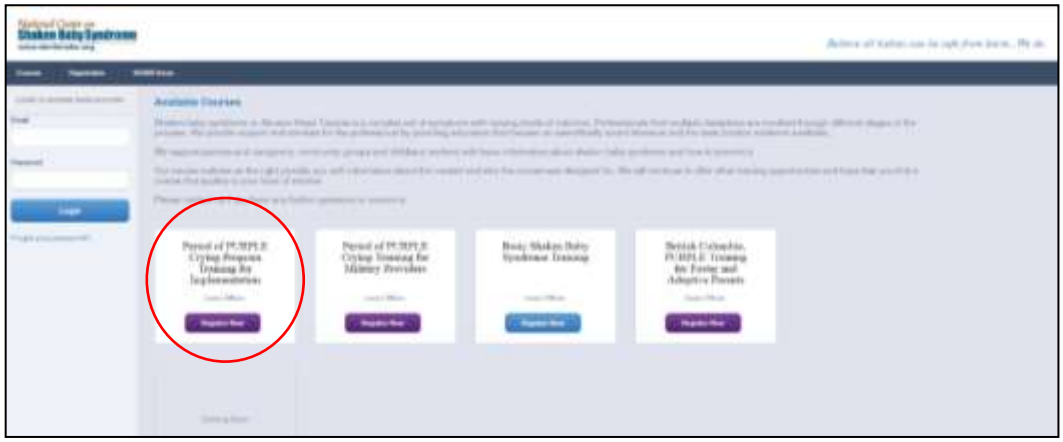
Go to training.dontshake.org to register.

Temporary access consists of a two-week preview, or longer if needed, for hospitals and organizations that are interested in learning more about the *PURPLE* program but may not be ready to implement the program. Ongoing access is for hospitals and organizations that have signed and returned the Fidelity Agreement and have, or plan to, implement the *PURPLE* program (Dose One: Delivery). Ongoing access is also available for Dose Two: Reinforcement organizations.

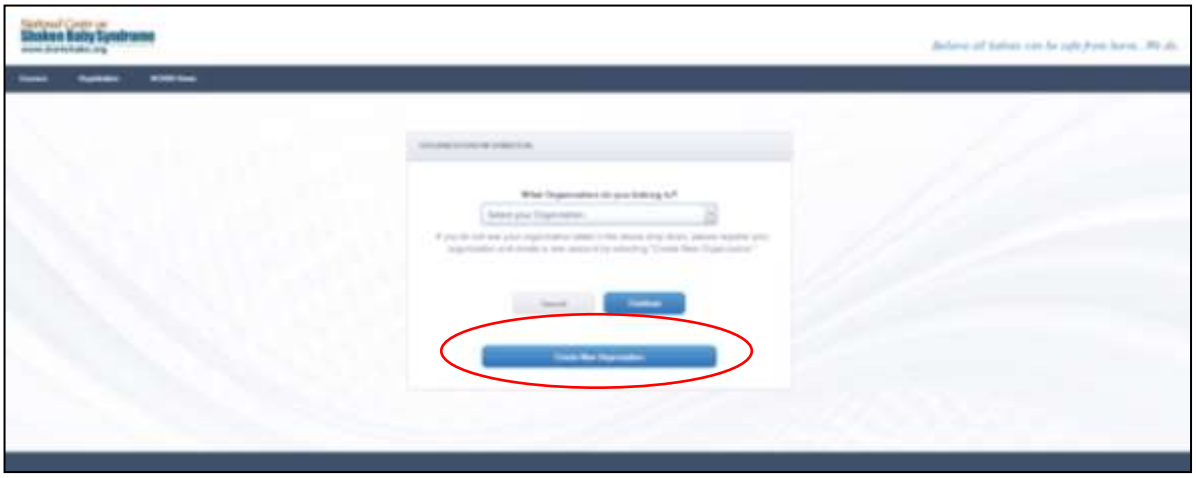
> *The *Period of PURPLE Crying* Training for Implementation online training modules were approved by The National Association of Social Workers for 1 continuing education contact hour.
>
> It was also approved for continuing nursing education activity by the Ohio Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

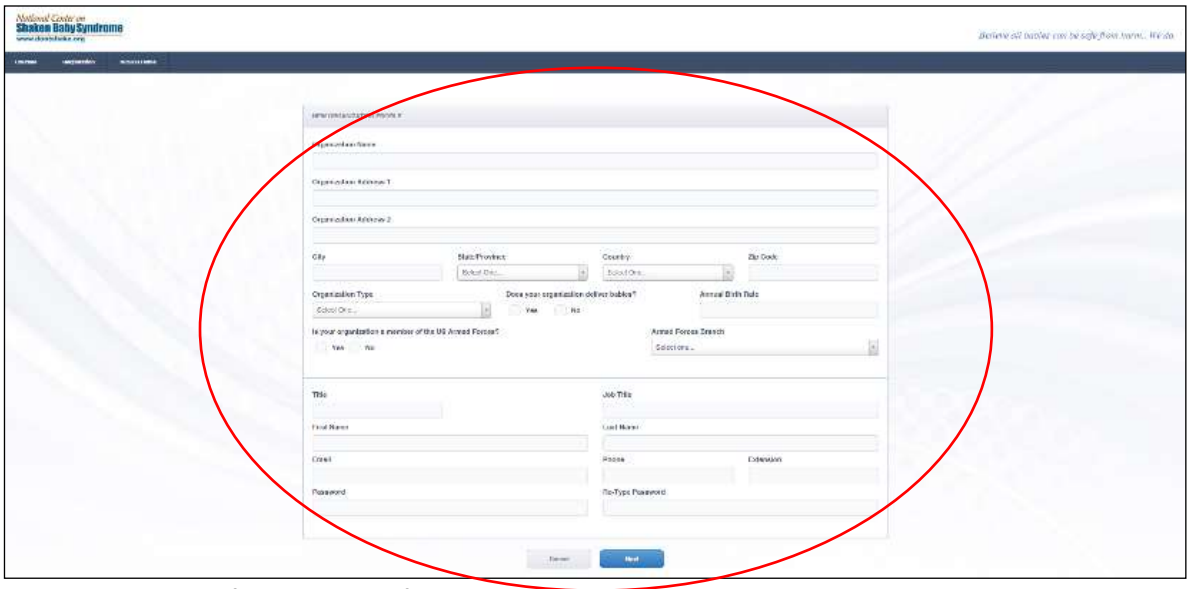
Online Training Module Registration

To register for the online training module go to, training.dontshake.org, and click "**Register Now**" for the course "***Period of PURPLE Crying* Training for Implementation**."

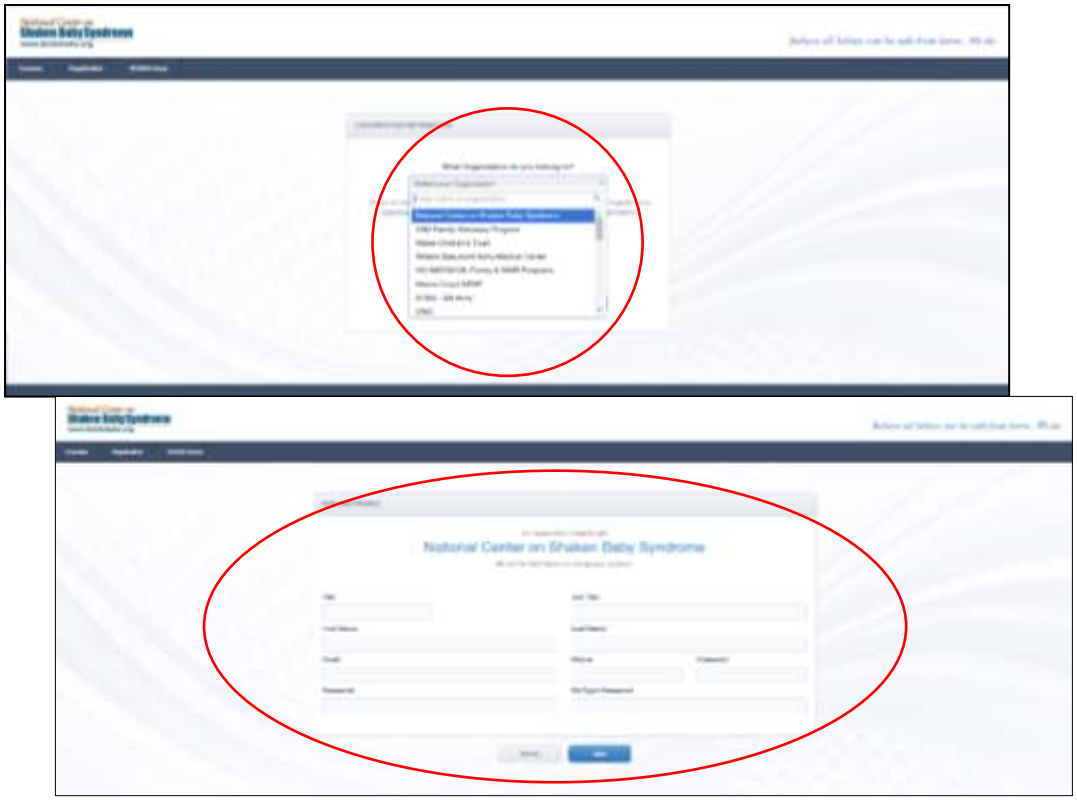


The initial registration process should be completed by the primary contact from the organization that will be responsible for the training of staff and will be the main contact between the organization and the *PURPLE* program staff. Their first step will be to set their organization up with a training account by clicking on, "**Create a New Organization**" and filling out the "**New Organization Profile**." The first person to register their organization will be listed as an administrator (admin). The admin will have special features regular users do not have access to such as: managing organization's profile, viewing who has registered under your organization, inviting and adding new users to join your organization, giving others administrator access, monitoring staff's training progress and results.





Once an organization is created your organization will appear in the "**What Organization Do You Belong To**" drop-down menu. New user's will select their organization, click "**Continue**" and finish by filling out their "**New User Profile**."

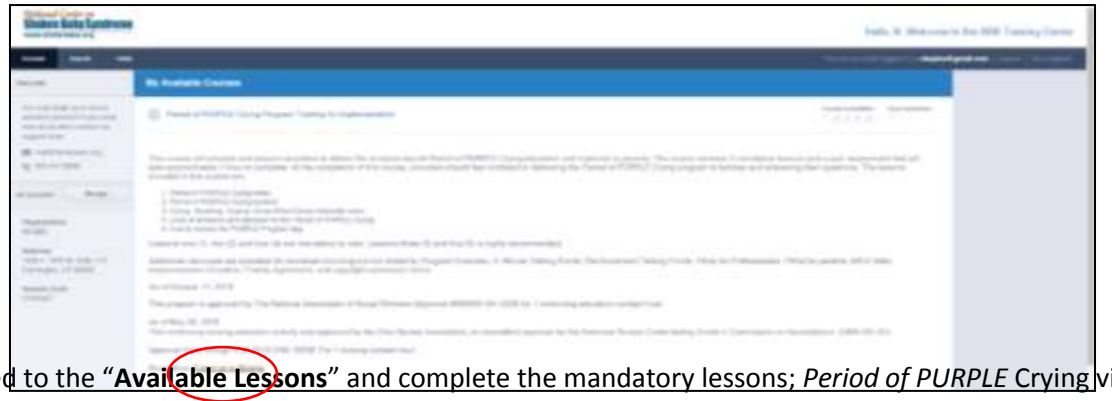


*The admin can also invite new users to register. The admin of the account will go under their "**Admin**" tab and click "**Users**." Under the User Manager click "**Invite New Users**" seen on the right hand side of your screen. In the bars, type in a desired user's email address. Click "**Invite**" and an email will be directly sent to them with a link to register. If preferred, the admin can also copy and paste the "**Invitation URL**", located within the "**Admin**" tab by clicking "**Organization**", in a separate email exchange.

Completing the Online Training

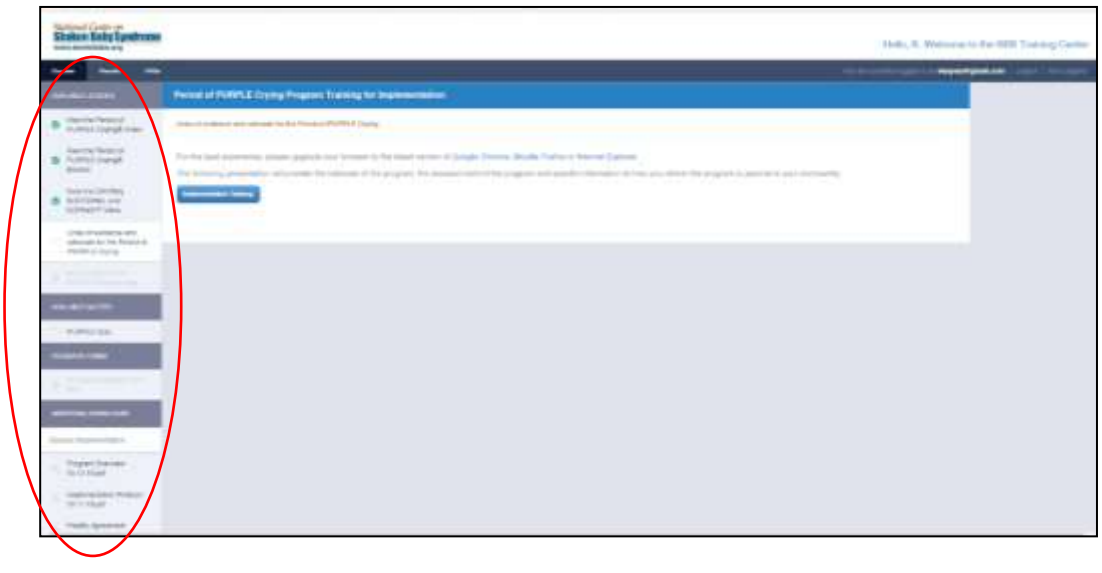
To complete or return to the online training visit, **training.dontshake.org**, and log-in using your email and password created during registration.

Once logged on to the module you will see "**My Available Courses**," select a course by clicking, "**Continue to Module**."



Proceed to the "**Available Lessons**" and complete the mandatory lessons; *Period of PURPLE* Crying video, *Period of PURPLE* Crying booklet and Lines of Evidence and Rationale of the *Period of PURPLE Crying*. Please note, each lesson will unlock once the previous lesson is complete. Once the mandatory lessons are viewed take the 10 question "***PURPLE* Quiz**" and review the "**Additional Downloads**" for important resources. Please note, to receive your certificate the "**Provider Feedback Form**" will need to be completed.

*Highly recommended to complete lessons: *CRYING, SOOTHING, and COPING* video and How to Access the *PURPLE* Program App.



Once the mandatory lessons, quiz and provider feedback form is complete the Training Certificate is available under the "**Results**" tab and by clicking "**View Certificate**" at the bottom of the page.

* The required approval statements for nursing and social worker CEU's are included on the certificate.

Train the Trainer Webinar

The Train the Trainer Webinar is a scheduled training that provides an enhanced version of the online training while giving guidance on providing a successful staff training. By training a trainer, many others will benefit from additional trainings that can be set up with a number of hospitals and community based agencies. For more information contact the *PURPLE* program staff at PURPLE@dontshake.org.

Onsite Training

The *PURPLE* program staff provides onsite training to individual hospitals, hospital systems, and organizations whenever possible. There is no cost for the onsite training; however, some variable costs such as travel and hotel accommodations need to be considered when planning onsite training with a *PURPLE* program staff member. Coordinators, educators, nurse managers are also in a good position to provide onsite training once they have been trained through the *PURPLE* Train the Trainer Webinar as described above.

> *A hard copy of the Training Quiz can be sent to Supervisors/Managers by request. The Quiz is passed when 80% of the questions are answered correctly and should be given out after the *Period of PURPLE Crying* Training for Implementation presentation. The quiz consists of 10 questions that are either multiple choice or true/false. Please contact the *PURPLE* staff for a copy of the quiz.

If your organization or jurisdiction-wide team is interested in scheduling onsite training or setting up an onsite Train the Trainer session or Webinar, please contact the *PURPLE* Program staff at 801-447-9360 or at PURPLE@dontshake.org.

Conference Presentations

Regional and national conferences are great opportunities for sharing the *PURPLE* program's lines of evidence, research and development with child advocacy groups, community-based agencies and healthcare professionals. If you would like to invite a *PURPLE* program staff member to present at a conference or if you have been invited to present the *PURPLE program* at a conference, please contact the *PURPLE* Program staff at 801-447-9360 or at PURPLE@dontshake.org.

Program Resources:

Program Overview
Your go-to guide when implementing the *Period of PURPLE Crying* program. The Program Overview provides an introduction to the program and includes information on the Three Dose Model, online training, program materials, steps to implementation, and ordering information.

Implementation Protocol
Describes the requirements for implementing the program according to the evidence based model. The document describes the protocol for delivery, delivery in terms of the Three Dose Model, training requirements, and Fidelity Agreement. This document should be read before signing the Fidelity Agreement.

Fidelity Agreement
All partnering organizations participating in Dose One: Delivery should sign and return this shared agreement. Return of this signed agreement confirms you have read and agree with the program's Implementation Protocol. The agreement requires two signatures, one from the leadership representative from the organization and one from *PURPLE* program staff. Both signatures are required before an organization can order program materials.

FAQs for Parents
This document contains the questions you may receive from parents who receive the program materials and provides the answers to those questions so you feel prepared to answer questions about the *PURPLE* program.

FAQs for Professionals
The NCSBS wants every professional to feel prepared to answer questions about the *PURPLE* program. This document contains the questions you may receive from medical professionals and others about the program, its research and value. The document provides the answers to these common questions.

Copyright Permission Form
Organizations that have implemented the *Period of PURPLE Crying* program are invited to show the 10-minute *PURPLE* video on an in-house TV system. The *PURPLE* program materials are copyright protected and therefore, a Copyright Permission Form needs to be signed by the organization wanting to show the 10-minute *PURPLE* video. This form is available upon request from NCSBS *PURPLE* program staff or from the online training. The form requires two signatures, one from the leadership representative from the organization and one from *PURPLE* program staff. Both signatures are required before a hospital or organization has permission to show the *PURPLE* video.

Dose 1 and 2 Implementation Checklist
Both Dose 1 and Dose 2 Checklist are used to help simplify and organize the steps to implementation. It walks you through each step that needs to be taken before delivering the program materials to families to ensure fidelity.

3 Minute and 10 Minute Talking Points
Both the 3 Minute and 10 Minute Talking Points offer steps that are ideal for providers to follow when delivering the *PURPLE* program to families. The 3 Minute Talking Points is an ideal delivery model when giving bedside education and the 10 Minute Talking Points is an ideal delivery model for classroom education.

TeachBack
The TeachBack is a teaching method described in both the 3 Minute and 10 Minute Talking Points. It is an evidence-based practice that creates an opportunity for dialogue in which the provider gives information, then asks the patient to respond and confirm understanding before adding new information. This document offers sample questions to ask, questions to avoid and additional considerations that will help you teach your best.

Example Policy
This document serves as example for you to create your own policy. Putting a policy in place will help ensure the program is sustained in the event of turnover. The main components of a policy should include delivery protocol, training for staff and new hires, inventory and storage of program materials and ordering.

NICU Letter
Questions often come up about whether the program should be given to parents who have a baby in the Neonatal Intensive Care Unit (NICU). The answer is yes they should but they do have special circumstances that need to be considered. For these parents the *Period of PURPLE Crying* program's chief researcher, Ronald G. Barr, MDCM, FRCPC, has written a NICU letter that is given to parents with the *PURPLE* program package. This letter encourages parents to talk to their nurse or doctor about what they can expect from their baby's crying patterns giving their baby's diagnosis. For example, babies who are drug exposed may have additional crying patterns starting right away rather than increasing at two weeks.

Dose 2 Materials
The NCSBS has provided FREE resources created for you to help with your Dose 2 Reinforcement needs. These items include: *PURPLE* Poster (English, Spanish and Bilingual), *PURPLE* Acronym and Crying Curve card, Community Flyer, and Reinforcement Information Card.

CHAPTER 8

EVALUATION OF *PERIOD OF PURPLE CRYING®* PROGRAM IMPLEMENTATION

Ronald G. Barr, MDCM, FRCPC

Introduction

There are a number of reasons why organizations or jurisdictions may want to evaluate their implementation of the *Period of PURPLE Crying* program. A common reason is that a donor or government organization that funds the program wishes to have a report demonstrating that their donation is making a difference. Similarly, the implementing organization often wants to know whether they are doing it right ("with fidelity") and whether they are making a difference ("changing the outcome").

Both questions are important; in fact, they are interrelated. For example, if after a period of time, there does not seem to be any reduction in the number of cases of shaken baby syndrome/abusive head trauma (SBS/AHT), one of the reasons could be because the program is not being delivered with fidelity. If the program was meant to be delivered to 100% of mothers in a hospital but was actually only delivered to 40%, then the chances of making a difference in outcomes are considerably reduced. Similarly, if the program is given to mothers by simply "throwing it in the bag" when the mother leaves the hospital rather than being specifically presented and reviewed by a nurse or other trusted provider, the program will have been delivered but not "with fidelity," and the chances of preventing abuse will be considerably reduced.

On the one hand, evaluations can be easy. The first principle of evaluation is to "count something." This may be relatively easy or difficult, depending on what one is interested in learning about the program or its implementation. But all evaluations start with counting (or measuring) something. On the other hand, evaluation can be challenging, because there are a number of ways in which meaningful and interpretable results can be obscured or lost altogether because of limitations in evaluation designs or the measures that are used. For this reason, any organization wishing to evaluate its implementation should try to partner with someone *specifically trained and experienced in evaluation and research*. As with all worthwhile endeavors, if an organization is going to commit to doing evaluation in the first place, it is worth doing it right so that the results obtained are useful to the organization carrying out the evaluation and, hopefully, to others.

The primary purpose of this chapter is *not* to be an instruction manual on how to do research. This is much better addressed in many textbooks and articles. The field of evaluation research is deep and wide and, as mentioned, requires appropriately trained professionals to do it right. Rather, the purpose of this chapter is to provide a framework for thinking about the *kinds* of questions that an organization may wish to ask and investigate.

"Process" Evaluations and "Outcome" Evaluations

A useful distinction in types of evaluations is between "process" evaluations and "outcome" evaluations. Simply put, *process evaluations* consider whether the implementation of a program is being done in the way it was designed, or expected, to be done. This is often expressed as delivering the program "with fidelity." All well-designed programs have well articulated descriptions of what should be done if the program is delivered as intended. Sometimes this is described as saying that a program is "manualized," meaning that there are clear, written descriptions of the processes of implementation. The *Period of PURPLE Crying* is such a program. The nature, goals, design and principles of the program are all well-described and articulated. Implementation is facilitated by having appropriate talking points and training materials available for all of the three "Doses" of the

program. Consequently, the program is a rich source for evaluating fidelity to determine if it is being implemented in ways that are going to make it most likely to be effective.

To take an example, the *Period of PURPLE Crying* program is a *primary, universal* program.(1) This means that it should be delivered to *all parents of a newborn infant*, not just to parents who might ask for it, or who are considered 'at risk.' Consequently, a reasonable process question is to ask—in a hospital, a county, or a state—what proportion of the parents of newborn babies actually received the program. Of course, if the parents received the program but did not use it (i.e. did not read the booklet, watch the *PURPLE* video, or both), then it would likely be a lot less useful as a prevention. So, a second process question that could be asked is what percentage of the parents of newborn infants read or watched (or both) the booklet and the *PURPLE* video.

Outcome evaluations consider whether the implementation of the program is changing some results considered important for the program. Since the *Period of PURPLE Crying* program was motivated and designed to help to address the problem of SBS/AHT, a very appropriate outcome evaluation would be to determine whether there was a reduction in the number of abusive head trauma (or shaken baby syndrome) cases following the implementation of the program compared to before program implementation. Although this seems like a straightforward question to ask and to answer, there are a number of important challenges to doing it correctly. We will return to that in a moment.

It is worth noting at this point that there can be *more than one outcome* that would be valuable to assess. While reducing the number of cases of shaken baby syndrome would be a very positive outcome, there are other outcomes that may also be valuable. For example, in North Carolina, the investigators evaluated whether there was a change in the number of calls to after-hours pediatric call-in lines for concerns about the crying of newborn infants (there was).[1] In British Columbia, the number of emergency room visits to the children's hospital for infants with complaints of crying unrelated to disease under six months of age was assessed(they were reduced by almost 30% following implementation of the *Period of PURPLE Crying)*[2] These outcomes are interesting and valuable for three reasons: (1) they are about normal infants rather than abused infants; (2) this is one indication of whether the new information about crying is actually helping parents; and (3) understanding whether, and if so how, health care services are utilized for concerns about crying is useful and potentially valuable for health care services planning.

Another example derives from the fact that the *Period of PURPLE Crying* program not only tries to prevent shaken baby syndrome, but also tries to support parents in dealing with their crying infant, whether or not parents would ever think of hurting their infant. Consequently, an appropriate outcome evaluation could be to ask whether providing the program improves caregivers' sense of efficacy in dealing with their infant, or reduces their feelings of frustration when their baby cries.

Challenges to Doing Evaluations

Choosing what question (or questions) one wants to ask and which evaluation to do is an important step. But wanting to ask one or more questions is only part of the process; one also has to understand what some of the challenges are to answering those questions. Here we discuss a few of the most obvious challenges that have to be taken into account when thinking about mounting an evaluation around these, or other, questions.

Measurement and Feasibility

Before one undertakes an evaluation to answer a process and/or an outcome question, it is important to be sure that (a) there is a good measure that can be used and that (b) it is feasible to use the measure.

Having a **good measure** is critical to evaluation. Being a "good" measure means that the measure is both **reliable** and **valid**. "Reliability" refers to the property of being stable when the same thing (or process) is measured at one time and then again at another, or simultaneously by two different measurers. If the measure is reliable, then it should be the same both times. Simplistically, "validity" refers to whether the measure provides us with a true description of whatever the entity is that we are trying to measure. (Actually, the concept of validity is more nuanced and the subject of a much longer discussion that an interested reader can pursue if interested).[3]

To provide a very simple example, let's assume that a person's "true" blood pressure is 140/80 (the higher number is called "systolic" blood pressure; the lower number is called "diastolic" blood pressure). However, when this person goes to a drugstore and uses the blood pressure cuff provided for self-monitoring, they may register a blood pressure of 160/100. This value is not a "valid" number, in that it is registering 20 units higher than the true systolic and diastolic blood pressures.

In passing, it is probably worth making the point that a measure can be *reliable but not valid*, and also *valid but not reliable*. We can illustrate this by the blood pressure example. Let's assume that the true blood pressure stays the same (i.e. 140/80) and that this person goes back to the drugstore the next day. On the one hand, if her blood pressure measures 160/100 the next day, then the blood pressure measure was *reliable* (it was the same on both days) but still *not valid* (it is not an accurate or true description of that person's blood pressure). On the other hand, if her blood pressure on that second visit was measured as 140/80, then that measure was *valid* on that day (it was a true or accurate measure of her blood pressure on that day) but *not reliable* (it was different between the first visit and the second day).

The same sorts of considerations are important if one was trying to evaluate the number of cases of SBS/AHT. As with blood pressure (or anything else), a good measure is one that is both reliable and valid. Let's assume that, in a particular state, there are 20 cases of SBS/AHT per year (in real life, this is likely to change from year to year of course). Let's also assume, for purposes of illustration, that you were measuring cases by extraction from administrative records (sometime called a discharge abstract data base) from hospitals in the state. If you detected 20 cases in the first year and 18 cases in the second, then this measure (discharge abstract data bases) would have provided you with a valid measure in year 1 but not in year 2. Furthermore, it would not be a reliable measure. If you detected 16 cases per year in each of two years, then the measure would have been reliable, but not valid.

Having said this, one always has to remember that no measure is 100% reliable and valid all of the time. There is always "measurement error." It is helpful if the source of measurement error is known (e.g. a system may only record "in state" cases, while those from the state that are treated in a neighboring state are not in the database). The point is not that you can never do evaluations unless you have a perfectly valid and reliable measure; the point is to be aware that measures need to be as reliable and valid as possible, and that some may meet these criteria better than others.

Another quality of measures is whether they are **feasible** or not; that is, are they usable in your setting. This is sometimes called **utility**. Some states may have child protection services (CPS) medical review committees or teams that prospectively review every case in a jurisdiction to confirm both the clinical findings and how certain one can be that the clinical findings are the result of abuse. Some states may have discharge abstract data bases available; some may not. If they have both, then you can compare them for reliability and validity. Since the CPS review committees have the determination of valid cases as one of their primary objectives, whereas discharge abstract databases have many functions (including being used to establish hospital charges), the CPS committee

is likely to provide a more valid and more reliable measure. However, if there is no CPS committee available or it is limited in the area served, discharge abstract data bases may be more feasible. (2)

Sample Size and Power

Depending on the area and population of the jurisdiction, your ability to detect and then demonstrate that a change in the number of cases of SBS/AHT or physical abuse from before to after the introduction of a prevention program may be constrained by considerations of the size of the sample needed to show a "statistically significant" difference in the number of cases (or rates; that is, the number of cases per 100,000 infants born in a year, for example). The number of SBS/AHT or physical abuse cases in 0-1 year olds is way more than any of us wants or we should ever accept, but from the research design and statistical point of view, these are relatively *low frequency* (or low incidence) events. They also tend to be *highly variable* from time period to time period (e.g. from year to year, there may be 3 cases in the state the first year and 12 the next). Consequently, it can be very difficult to tell whether a change in the number of cases (or incidence) is really due to the introduction of the prevention program, or whether it happened as part of the normal variability in the number of cases (or rates).

As with other topics in this introduction, an appropriate understanding of considerations of the size of the sample that needs to be considered in order to determine whether or not the implementation of your program was having an effect would require a thoroughly trained and experienced professional. Once they know the population that you are serving, what available information there is about the "baseline" (or pre-implementation) rate of cases in your jurisdiction, how many years of baseline and follow up you will have available, and what a reasonable expectation is of the numbers of cases that you hope to prevent, then that professional can estimate what the *power* of your study is likely to be; that is, what is the probability that, when your study begins, you will succeed in detecting a durable reduction of a certain size (say, 50%). A durable reduction is one that is not a one-time fluke, but rather a reduction that can be expected to persist in the long term. Technically, one minus this probability is referred to as the **beta (β) level**.

If your funder demands that you be required to "demonstrate" a difference as a prerequisite to funding, then you should definitely get appropriate consultation as to whether this is ever likely to be achieved. Given currently estimated rates of SBS/AHT in the USA (approximately 30 per 100,000 live births for infants < 1 year of age (2)), states with 50,000 births/year may not be able to *demonstrate* even a 50% reduction unless they have many years of baseline and many years of post-implementation observations. Just to be clear, a 50% reduction would be a very large reduction in the number of cases. Many child abuse professionals would be impressed with a 20% reduction in such a serious condition. But the smaller the percent reduction that you are willing to accept as a "successful" prevention in your jurisdiction, the larger your sample must be and the more years of observation you will need to demonstrate that that reduction was due to the implementation, and not just the variability in rates that was there for years.

The fact that these issues of sample size and power are challenges does *not* mean that the number of cases should not be tracked nor that no attempts at evaluation should be made. It is *always* valuable to determine as reliably and validly as possible the numbers of cases before and after an implementation. It does mean, however, that you should be careful not to promise something to your funders that you will not be able to deliver (such as a *demonstration* that you have unequivocably reduced SBS/AHT). It also means that you need to be aware that *interpreting* your results (whether an increase or a decrease in cases or rates) will need to be done carefully and conservatively, so that you neither over interpret nor under interpret your results.

Other Approaches to Quantitative Evaluation of the *PURPLE* Program

It is understandable that one of the first questions that a funder or an implementer wants to answer is whether you are making a difference (a reduction) in the number of cases of SBS/AHT. The program is implemented with the aim of reducing the number of cases, and so it is reasonable to want to know if that has been achieved. This is why we have discussed this specific question first. But, for the reasons mentioned above, answering this question with quantitative data may be challenging, especially if one is talking about a single hospital, a city or a smaller state or jurisdiction.

But it is relevant to understand that this is not the *only question* that can be meaningfully evaluated, nor is it the *only kind of quantitative research* that can be meaningfully done to provide answers. A helpful distinction is to consider two categories of quantitative research: the first is *descriptive* research, and the second is *hypothesis-testing* research. *Descriptive* research is the collection of measures (or counts) that can be summarized to provide a description of an important phenomenon. An example might be that one would be interested in knowing the demographic characteristics (male/female; age; relationship to the victim; location of the household) of perpetrators of SBS/AHT in your jurisdiction or state. *Hypothesis-testing* research is the comparison of two groups, conditions, or interventions to see if one is better (or worse) than the other. When there is one situation in which there is an intervention and another in which there is not (or there is a different intervention), one can then test whether the situation with the intervention is doing better (or worse) than the comparison situation. Traditionally, one hypothesizes that there is *no* difference between the two (this is called the "null hypothesis" for "no difference"). What your research tries to show is that it is *very unlikely* that this no difference hypothesis is true (traditionally, less than 1 chance out of 20, or 5%).

Both descriptive research and hypothesis-testing research have a number of *statistical tools* appropriate to each type of research. In the case of descriptive research, these tools are used to help describe the characteristics of the phenomenon being measured; in the case of hypothesis-testing research, they are used to assess what role chance might have played in coming up with whatever differences are found, and the degree to which chance might be a plausible explanation for the results obtained. As with other concepts mentioned here, the appropriate use of such statistical tools is best accomplished by a trained professional.

Descriptive research. An example of descriptive research that helped to define when the *Period of PURPLE Crying* program needed to be introduced to new parents was the publication of the distribution of ages of infants who were victims of SBS/AHT. Figure 1 is taken from a paper by Barr, Trent and Cross (2006)(3) in which they used data from California hospital discharges to describe the ages of infants when they were hospitalized for SBS/AHT. As you can see, a number of properties of this distribution are apparent from simply plotting how many cases were hospitalized at each age. First, there is a clear "peak" pattern with the peak age occurring at 12 weeks of age. Second, the peak is closer to birth (0 weeks) of age than to 1.5 years of age (80 weeks of life) rather than being evenly distributed over the age range studied. This is called a "skewed" distribution. Third, if you draw an imaginary vertical line on the graph at 6 months (26 weeks), it is clear that more of the cases occurred *before* 6 months than after 6 months. In fact, about 65% of the cases occurred before 6 months. From just this simple description of the age-related distribution, it is clear that any prevention would need to get to parents of new babies by about 2 weeks of age at the latest. If the intervention did not reach them before 6 months, it might still prevent some cases but at least 65% of cases will already have occurred by then.

Hypothesis-testing research. An example of hypothesis-testing research that provided evidence that the *Period of PURPLE Crying* program materials were effective in increasing maternal knowledge about early infant crying and some behaviors important for prevention is illustrated in the Table. This table is taken from an article by Barr, Rivara, Barr et al (2009) (4) in which they compared scores on a scale to test knowledge about the

characteristics of crying and of the danger of shaking in parents of newborns that had been randomized (assigned by chance) to receive the *Period of PURPLE Crying* program materials or a similar set of materials about infant safety.

Table. Primary outcomes for knowledge scale differences at the end of the study, by trial arm, using known and multiply imputed data. Scales range from 0 to 100. A positive difference favors the *PURPLE* intervention arm.

Scale	Intervention arm (N=1374)			Control arm (N=1364)				
	N*	Mean	SD	N*	Mean	SD	Differences	95% CI**
Crying Knowledge	1138	69.5	18.5	1117	63.3	12.3	+6.2	+5.0 to +7.3
Shaking Knowledge	1157	84.8	10.7	1138	83.5	9.4	+1.3	+0.5 to +2.1

*number of subjects with known data
**CI = confidence interval

This table contains a great deal of important information that helps to convey the results of this hypothesis-testing research. In the first column, the names of the two scales that were used are indicated. In the second column, the "intervention arm" refers to the group of mothers that received the *Period of PURPLE Crying* program materials (the "intervention") and indicates how many of those there were (1374).

In the subdivided first column, there are three sub-columns. The first indicates the actual number of subjects who completed each scale (those with "known data"); the second indicates the mean score on the 0 to 100 scale (often thought of as the "average" score for the group); and the third indicates the SD for "standard deviation" that is a measure of how much variability (or "spread") occurred in the scores that this group achieved on the scale. All of these measures are important *descriptive* measures of the results from this group. Going back to the top row, the third column contains the analogous descriptive data for the "control arm," that is, the group of mothers that received the control educational materials on infant safety. The fourth column called "Differences" indicates both the difference in the mean scores between the intervention and the control groups, and the direction of the difference (the "+" sign means the group that received the *PURPLE* program materials was higher).

So far, all of these measures have been *descriptive* in nature. However, the last column provides the key information for the hypothesis-testing comparison; the CI, or "confidence intervals." These values are statistical derivations from the mean and SD's for the scores of the groups that indicate the limits within which the reader can be 95% confident that the *difference* in the mean scores falls between those limits. So, for example, the reader can be 95% sure that the true difference between the scores of the intervention group and of the control group lies between +5.0 and +7.3. Furthermore, if the confidence intervals do not include the value of 0, them the statistical analysis has indicated that it is unlikely that the true means are equal. The 95% level of confidence is conventionally accepted as allowing the researcher and the reader to conclude that the difference in scores between the two groups was not due to chance alone, and that the null hypothesis of no difference between

the two groups can be rejected; in short, that the difference in scores is real. This is the kind of reasoning and some of the measures that are used in *hypothesis-testing* research.

This description may be more than you want to know about the measures, language and types of quantitative research that can be done to evaluate the *Period of PURPLE Crying* program (or other) interventions. As mentioned previously, none of this will "make a researcher" out of you, but it does indicate that important research is possible and can be done whenever the program is implemented. Further, it illustrates that there is not just *one* kind of research that can be done that is useful and helpful. Some kinds of research are relatively simple and require only modest resources; some are more complicated and require significant resources that may or may not be available. But all of it is helpful in allowing the implementers to know more than they would know if the evaluations were not done, and to be able to be confident in what they know, rather than merely guessing.

More important for the implementer, perhaps, is deciding on what the most important questions are that one wants to ask and evaluate, and being clear about whether the phenomena that are being evaluated can be measured, and can be measured feasibly in the context in which the program has been implemented. The details of the design and the statistical techniques can be worked out with a collaborator that is trained and experienced in research and evaluation techniques.

In the following sections, we will focus on some of the kinds of questions an implementer might want to consider tackling if they wanted to evaluate their implementation, or at least some aspects of their implementation. To approach this, we will go back to the distinction between process questions and outcome questions previously described. With each question there will be provided a brief annotation [in brackets] as to why this question may be important and significant for the implementers and/or funders.

Process Questions

1. What percent of the target population that the program intends to serve actually received the program? [Since the *Period of PURPLE Crying* program is designed to be used as a primary, universal program, this question addresses an important criterion for whether it is being delivered as designed for optimal effectiveness].

2. What percent of the participants who received the program read the booklet, watched the *PURPLE* video, or read and/or watched the booklet and the *PURPLE* video [Having the materials but not using them is likely to reduce the effectiveness of the program, so this is an excellent criterion to support the argument that the program is being used optimally. Of course, a well implemented program has other criteria for being delivered with fidelity, such as having the materials being provided to the parents by a person whom the parents trust (such as a nurse), and being delivered according to the talking points to make sure that the appropriate messages are heard and received by the parents as well. But reading and/or watching the materials is nevertheless a key criterion].

3. What percent of families had someone other than the mother present when the *Period of PURPLE Crying* program was delivered? [The *PURPLE* program information is important not only for the mother, but also for the whole "family" of caregivers. Nor, of course, is it mothers who most commonly shake or injure their infants. For both of these reasons, the program is likely to be more effective if other-than-mother family members are also present when the materials are presented].

4. Who were these other-than-mother family members? [This process measure helps you to know who else knows and likely will support the mothers among the family members, and can help spread the knowledge incorporated in the *PURPLE* program].

5. What percent of the fathers of newborns were presented with the program? [In all series to date, fathers have been the most likely perpetrators of SBS/AHT and infant abuse secondary to crying. Consequently, if you can document that you are reaching fathers when the *PURPLE* program is being presented, that would be of considerable value in enhancing the likely effectiveness of the program. In the British Columbia trial, maternity nurses were shown to be reaching on the order 81% of fathers. This indicates that providing the materials during the maternity stay may be one of the most effective ways to educate fathers as well as mothers.]

6. When nurses are providing the parents with the materials, what percent of the time does the nurse use the booklet as talking points for presenting the *PURPLE* program to the parents? [Part of the protocol for providing the program as designed is that the nurse use the booklet by having the parents go through it with them. This assures that the parents have been "inside" the materials at least once and provides a consistent "script" for presenting the materials. Furthermore, it means that the materials were not just dropped in a bag as the mother was discharged home from the hospital. Consequently, determining what percent of parents actually went through the booklet with the providers provides a good measure of program fidelity].

7. What percent of the parents watched the *PURPLE* video while in the birthing facility? [For most people, the *PURPLE* video is a very memorable experience and helps parents learn. Not all hospitals have the equipment available to provide a viewing opportunity for parents, but if they do, assessing what percent of parents actually watch the *PURPLE* video while they are in the hospital assures that they have seen the material at least once. The higher the percentage of parents who have watched it, the more likely it is to be effective].

8. What percent of new nurses assigned to the floor were appropriately trained by viewing the on-line modules available on the NCSBS website? [There is always turnover of nursing staff in the hospital. Even if > 80% of the original nursing staff appropriately received training, the number of *trained* nurses will decline as nurse turnover occurs over the course of a year. As that occurs, the likelihood that the *PURPLE* program will be presented appropriately, or even be presented at all, is likely to decline. Consequently, tracking whether nurses assigned to maternity services take the training is an excellent process measure.]

Outcome Questions

1. Is there a reduction in the number of cases of SBS/AHT after compared to prior to the introduction of the *Period of PURPLE Crying* program? [This is of primary interest because it is one of the reasons that the program was developed in the first place. However, for the reasons previously mentioned, it may not be very feasible to *demonstrate* a reduction for reasons that include ease of ascertaining cases, low incidences of SBS/AHT, small sample sizes, variability from year to year, and so on. Nevertheless, it is valuable to have a tracking system for cases that is similar both before and after the introduction of the program—and the longer period of time the better. Also, it will take time before implementation of the program is complete, so a change is not likely to be immediate.]

2. Is there a reduction in the number of cases that seek medical help for crying unrelated to a disease in the first six months of life? [As indicated, even though this does not measure SBS/AHT, it does measure whether the program is having an effect on many families in the postpartum period and on the health care delivery system. This could be measured through evening call-in services (as in North Carolina) or in pediatric emergency room visits (as in British Columbia) or in other systems. What one chooses to use will depend on whether there is a systematic way of counting such cases accurately. However, an advantage is that there are many more cases of parents seeking medical advice for a crying infant than there are cases of SBS/AHT, so one can do a meaningful study in a smaller jurisdiction in a shorter period of time to assess whether there is a change that can be demonstrated statistically to be making a difference].

3. Do parents appreciate receiving the *Period of PURPLE Crying* program? [This question does not assess whether a change in the number of cases takes place and, in that sense, is not a typical outcome measure. However, hospitals or institutions may want to know whether the program is valued by parents that receive it, or whether they consider it a waste of time. In that sense, evaluating whether the program is appreciated by parents (or makes them feel more efficacious as caregivers because they know more about crying) can contribute to a hospital sustaining its support for the program.]

4. What percent of families read and/or showed the *Period of PURPLE Cryi*ng program materials to:
    a. Other members of the family?
    b. Transient caregivers?

    [This is a good outcome question because a key principle of the *PURPLE* program is that the mothers take the program home with them so that they can share it with anyone else that will be looking after their baby. Consequently, the request to share the materials is part of the program, and the nurses are asked to explicitly encourage mothers to share the program. This question determines whether the parents actually do share it. This does not address whether the number of cases of SBS/AHT is reduced, but it does address one of the pathways to abuse (i.e. temporary caregivers who are perpetrators). This is sometimes called a *proximal outcome*; that is, it evaluates one of the risk factors on the causal pathway to abusive shaking].

These are just a small sampling of the kinds of questions that can be generated, asked and evaluated. And, of course, the questions do not have to be limited to the Dose 1 phase of the program. Analogous questions can be asked in institutions and services that support families in Dose 2, where the primary function is to remind and reinforce parents in their knowledge of crying and the dangers of shaking. Similarly, important questions can be asked of Dose 3, the public education phase of the program. A fascinating question was asked and answered by the team in London, ON, who determined what areas of the town most of the cases were coming from so that they could choose the optimally beneficial areas as sites in which to put up public education billboards (Stewart, Polgar, Gilliland et al, 2011).(5)

When a team begins to think about the possibilities, many valuable questions tend to emerge. The challenge then is to decide which questions are most important for the site, the team, the jurisdiction or the funders. Then the important work of determining the measures and the feasibility of the study need to be addressed.

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CHAPTER 9

PURCHASING AND SHIPPING

The NCSBS is the sole source provider of the *Period of PURPLE Crying* program materials. After a representative from your organization has registered for the online training and has signed/returned the Fidelity Agreement, the program materials can be purchased in any quantity over 100. Free personalization of the Reminder Card is available for orders of 10,000 packages or more. (Refer to the section Personalization of Materials in this chapter for more information).

***Period of PURPLE Crying* Program Materials**

The cost of the *PURPLE* program materials will be offered at the following flat rates:

English, Spanish, French *PURPLE* Booklet + Web and Mobile (only English currently) App:	English, Spanish, French *PURPLE* Booklet + DVD:	All Other Languages *PURPLE* Booklet + DVD:
$2.00 per package	$2.30 per package	$3.50 per package

Ordering Methods:

PHONE	FAX Purchase Order / Order Form	EMAIL Purchase Order / Order Form	ONLINE
(801) 447-9360	(801) 447-9364	PURPLE@dontshake.org	http://store.dontshake.org/category-s/110.htm

Important Ordering Details:

• If this is your first-time order, please call the *PURPLE* staff to order. Re-orders are accepted via any of the above order methods (phone, fax, email, or online).To order online, first register your organization; http://store.dontshake.org/register.asp. Within 24 hours you will be validated as a *PURPLE* customer and will have access to the *PURPLE* online store.

• The NCSBS payment policy states that every order requires a credit card payment, check payment in advance or purchase order (PO) (If you are paying via purchase order or check payment in advance, please contact the NCSBS for a quote, as we charge exact shipping and these costs will vary)

• Please note, we charge shipping fees.

• Click here to view the Accounts Receivable Policy.
• The minimum order requirement is 100 program materials. Quantities refer to total order regardless of the combination of languages or type of program materials (booklet/App or booklet/DVD).

Shipping

All in-stock, non-personalized orders are processed within 48 business hours. A shipping confirmation with tracking number is provided once an order is processed. PLEASE NOTE: Orders containing the *Period of PURPLE Crying* program web and mobile app package may take up to 7 business days to process.
All program materials are shipped via UPS Ground unless otherwise requested or in special circumstances where another shipping provider or service is required. *PURPLE* DVD/booklets are shipped in the quantity ordered; however, a small box (11 x 8 x 6 inches and weighs 11 pounds) holds 100 program materials and a large box (16 x 15 x 11 inches and weighs 42 pounds) holds 400 program materials.

UPS offers different services that allow for delivery times anywhere from 1-5 days. Delivery times and shipping costs are based upon distance from our office location in Farmington, UT, Zip Code 84025. UPS shipping services available include:

- UPS Ground – 1-5 Business days based on distance to destination;
- UPS Next Day Air Early A.M. – Delivery as early as 8:00 A.M.;
- UPS Next Day Air – Delivery typically by 10:30 A.M.;
- UPS Next Day Air Saver – Delivery typically by 3:00 P.M.;
- UPS 2nd Day Air A.M. – Delivery typically by 10:30 A.M.;
- UPS 2nd Day Air – Delivery typically by end of day;
- UPS 3-Day Select – Delivery by end of day.

The customer is responsible for all initial shipping charges, which will be displayed on the invoice, unless customer has listed their own account on PO.

Residential and Commercial Addresses

When possible, please specify a commercial ship-to address. Shipping to residential addresses may result in an additional fee that is based upon shipment size. If a residential ship-to address is required, please specify this need when ordering.

Please verify that the ship-to address you provide is accurate and complete. UPS will charge the NCSBS a fee for addresses that need to be corrected. This fee will be passed on to the customer.

UPS Freight

Larger quantity orders may be eligible to be shipped via freight and normally results in a cost savings. The NCSBS explores the possibility of shipping freight when compiling quotes (see Quotes, Invoicing, and Returns in the section below) and will contact the customer if shipping via freight is an option that is more cost effective. However, in order to receive a freight shipment the customer must be qualified in the following ways:

- To receive palletized freight shipments, customers must have a drop dock at the location to which the palletized freight shipments will arrive.

- To receive non-palletized freight shipments, customers must have a representative available to assist with the unloading of items at the time the shipment arrives.

Quotes, Invoicing, Payment Policy, Payment Methods and Returns

Quotes

The *PURPLE* program staff is happy to provide quotes to customers when requested. The *PURPLE* program staff will do its best to supply an accurate quote within 48 business hours. The prices represented on a supplied quote will be honored for a period of 30-days.

Customers will need to provide the NCSBS with the following information:

- quantity, language and type (booklet/App or booklet/DVD) of program materials to be purchased*;
- accurate shipping address;
- accurate billing address;
- any special circumstances (personalization, separate "bill to" organization, etc.); and
- deadlines for shipment to arrive (if needed).

**For those customers who are requesting invoices to be created based on a set budget, customers would substitute the dollar amount in place of the quantity of program materials requested. The NCSBS will create an invoice that fits within the specified budget.*

Invoices

Invoices are generated and sent with customer shipments. Invoices are also sent via email to those customers who provide an email address to which the invoice can be sent. All invoices are subject to the NCSBS payment policy of Net 30 Days from the shipment date.

Payment Policy of Net 30 Days

Payment of the entire invoice amount is required within 30-days of the recorded shipment date which appears on the generated invoice. Any unpaid balances at 31-days are subject to a 3% interest charge compounded monthly or a $5.00 finance charge, whichever is greater.

Payment Methods

The NCSBS accepts payment in U.S. Dollars. Payment in currency other than U.S. Dollars is subject to an additional processing fee. The following are acceptable forms of payment:

Cash

- Cash payments are only accepted in person at the NCSBS office.
- DO NOT send cash by mail.

Credit/Debit Cards

- Visa, Mastercard and American Express are accepted.

Checks/Cashier's Checks

- Checks made payable to “National Center on Shaken Baby Syndrome” or “NCSBS”
- Check payments are mailed to:
  National Center on Shaken Baby Syndrome
  1433 North 1075 West
  Suite 110
  Farmington, UT 84025
- Checks are processed on the day of receipt. The NCSBS will not honor post-dated checks.
- Checks returned due to insufficient funds are subject to any fees associated with the NCSBS’ financial institution’s handling of a returned check.
    - Accounts who have a returned check due to insufficient funds will be required to pay the balance on their accounts with viable options other than check.

Wire Transfers

- Please contact the NCSBS Financial Controller at 801-477-9360 to coordinate wire transfers.
- Any fees associated with the wire transfer are the responsibility of the customer.
- After wire transfer is complete, please send a copy of the wire transfer confirmation to the NCSBS Financial Controller.

Returns

Return of unused, unopened (wrapped) *PURPLE* DVD/booklet may be returned for a refund equal to the price at which the packages were purchased. Shipping costs to return the *PURPLE* packages to the National Center are charged to the customer returning the products.

Personalized *PURPLE* DVD/booklet (Refer to Personalization of Materials in the section below) and *PURPLE* Web and Mobile App/booklet are not subject to return for refund. These program materials are identified with customer logos, customer numbers and contact information and are not available for resale by the NCSBS.

Personalization of Materials

Personalization of the Reminder Card that is included with the *PURPLE* materials is available free of charge for orders of quantity 10,000 or more. Personalization includes placing up to two (2) logos, any relevant contact information or hotline numbers and approved custom messages (for example, thank you to sponsors, collaboration inclusions, etc.) The personalized logos, contact information and messages will appear in the lower section of the Reminder Card below the line separator. Personalization of smaller quantity orders is also available and subject to current printing fees. Quotes and requests for personalization are processed through the *PURPLE* staff at PURPLE@dontshake.org.

Submitting Logos and Personalized Information

Logos and the personalized information to include on the Reminder Card (insert) including: contact information, custom message, and the like should be sent to the *PURPLE* program staff at PURPLE@dontshake.org. Logos should be high resolution vector format in order to maintain the integrity of the logo when used in print. Logos are acceptable in the following file formats:

- EPS – Encapsulated Postscript;
- .AI – Adobe Illustrator;

- .PDF – High Resolution Portable Document Format;
    - Should contain a vector object;
- High Resolution Raster Image (Over 200K in Size);
    - .JPG – Joint Photographic Experts Group;
    - .GIF – Graphics Interchange Format; or
    - .PNG – Portable Network Graphics.

Please include any branding policies that may pertain to any of the logos provided. Any questions regarding logo formats, usage or other technical support should be directed to the *PURPLE* Team at PURPLE@dontshake.org

Process and Timeframe

Once the logos and personalized information are sent to the *PURPLE* program staff, the NCSBS will input the logos and information into the Reminder Card design and email a PDF proof to the organization representative(s) within two business days. Requested revisions will be made by the NCSBS, and PDF proofs will be sent for approval until the final artwork is approved by both parties.

Organizations that purchase personalized *PURPLE* materials can expect to receive their order within 4-6 weeks (from the date the personalized Reminder Card has been approved by the *PURPLE* program staff and purchaser) to accommodate the time required to approve and print the personalized Reminder Card as well as assembly of the Reminder Card into the package with the *PURPLE* program materials.

CHAPTER 10

FUNDING AND SUSTAINABILITY

Funding

One of the biggest considerations in planning to implement a prevention program is how much it will cost and how it will be funded. Leaders need to identify, evaluate and prioritize an array of potential funding sources to support the initiative. The information gathered will be most useful in determining what strategies to employ to secure funding and how the sustainability plan will be written. If the main goal is to get the program started and implemented with soft money (grant funds that will eventually come to an end) then it will be important to plan for longer term funding in the sustainability plan. If there are opportunities to incorporate the funding into the budget of the institution implementing, then this is considered hard money (line item budgets within an institution) and will be more effectively sustained.

Successfully securing funds will ultimately depend on several unique circumstances. The *Period of PURPLE Crying®* program staff is available to share information with you and have discussions around different options that will be most helpful for your organization. Contact *PURPLE* program staff at 801-447-9360 or PURPLE@dontshake.org.

PURPLE Program Grant Template

The *Period of PURPLE Crying* Grant Template was created to assist organizations with funding efforts. The template describes in detail the program rationale, research, development, three dose model, implementation processes and sample methods for evaluation. The template has been designed for the beginner or expert grant writer. The template can be copied and pasted as necessary. There are also helpful suggestions for incorporating *PURPLE* program content into your own grant proposal. Once you have identified a perspective funder, contact the *PURPLE* program staff at 801-447-9360 or PURPLE@dontshake.org to request a copy of the *PURPLE* program Grant Template.

Sustainability

Sustainability is the ability to generate long-term improvements for an extended period of time despite ongoing changes in funding sources, service providers, community demographics and other factors. Further, as communities change over time, the demand for services may grow or shrink. Changes are almost certain to occur in sources of funding, public policies and other forces that affect the initiative. Long-term sustainability is about making sure the positive results that the program realizes for children and families are continued for years to come regardless of the changes that are occurring in the environment in which the program is operating.

Sustainability of an evidence-based program is an important planning step toward achieving a public health impact. Developing a clear plan, right from the initial implementation planning stages, helps put into place and keep in place the key elements that make a program successful. This requires consideration toward finding adequate funding, and political, technical and administrative resources. Sustainability planning should be done throughout the life of the program initiative and a plan works best when it is used and reviewed on a continual basis. It gives program managers and key leaders a plan for where they are going and benchmarks for determining whether they are successful reaching their goals.

***PURPLE* Sample Policy**

One of the *PURPLE* program implementation partners developed a Policy on the program to be included in departmental general policies to provide specific guidelines for processes to ensure procedures are followed for re-ordering of program materials, staff training, new hire orientations, patient discharge delivery, storage etc. The *PURPLE* program staff was given permission to share this policy with other partners to serve as an example and guideline should a policy be appropriate. Incorporating a policy for your organization is encouraged. According to implementation and dissemination literature, the hard work of implementation is often lost with changes in staff and reorganization.

For a discussion about sustainability or structuring a sustainability plan, contact the *PURPLE Team* at 801-447-9360 or at PURPLE@dontshake.org.

CHAPTER 11

BRANDING STANDARDS, POLICIES AND PROCEDURES

Period of PURPLE Crying® **Branding Policy**

The *Period of PURPLE Crying* is a registered trademark and all content is copyright protected. All rights reserved, Ronald G. Barr, MDCM, FRCPC and the National Center on Shaken Baby Syndrome (NCSBS). Information and material contained in the *PURPLE* program materials are the property of the NCSBS and cannot be sold or reproduced in any form unless otherwise specified in this document or without explicit permission from the NCSBS.

The *Period of PURPLE Crying* is fast-becoming a trusted brand, not only in the field of shaken baby syndrome/abusive head trauma (SBS/AHT) prevention, but also in infant physical abuse prevention generally. Much work and great attention has gone into building and maintaining the brand.

The following policies set forth the approved usage of the *Period of PURPLE Crying* program name and materials. Adherence to these guidelines will protect the integrity of the *PURPLE* identity and ensure consistency in the messages and communication between available *PURPLE* programs throughout the world.

Use of the *PURPLE* Program with Competing Messages

The NCSBS discourages combining the promotion of the *PURPLE* program with information or work from other programs that contain messages contrary to the *PURPLE* program messages.
For example, combining the *PURPLE* message with statements or programs that suggest that ALL infant crying can be soothed may confuse and frustrate users of the *PURPLE* program. Any questions about programs or materials that may provide conflicting messages to the *PURPLE* program should be directed to the *PURPLE* Program Director at 801-447-9360 or at PURPLE@dontshake.org .

PURPLE **Program Color Settings**

The shade of purple used with the *PURPLE* program should remain as consistent as possible and should be added as a fifth (5^{th}) color for CMYK print jobs to ensure consistency. Processed colors can often lose their integrity when produced in large quantities. The color separations of
the purple color are as follows:

CMYK		*RGB*	
C:	76	R:	112
M:	100	G:	45
Y:	7	B:	137
K:	0		

***PURPLE* Program Logo**

The *Period of PURPLE Crying* program logo is one of the most critical components of the *PURPLE* program branding strategy. We ask that you read the branding policy carefully prior to using the *PURPLE* logo in any promotional materials.

Fig 1. *PURPLE* Logo Long with Tagline

Fig 2. *PURPLE* Logo Long No Tagline

Fig 3. *PURPLE* Logo Stacked with Tagline

Fig 4. *PURPLE* Logo Stacked No Tagline

Fig 5. White *PURPLE* Logo on Dark Background

The *PURPLE* program logo consists of the following components:

- The words “The Period of” and “Crying” formatted in font Times New Roman and boldface;
- The word “*PURPLE*” in all capital letters formatted in font Arial Black and in the purple color settings described in the section above (*PURPLE* Program Color Settings);
- The registered trademark logo “®” following the word “Crying” formatted in font Times New Roman and superscript; and
- The tagline “A New Way To Understand Your Baby’s Crying” formatted in font Times New Roman, boldface, and italicized.
    - You may choose to use the logos with or without the tagline; however, the NCSBS prefers the use of the logos with taglines whenever possible.

Use of the *PURPLE* Program Logo

The *PURPLE* program logo may only be used with express consent from the NCSBS. Please adhere to the following guidelines when using the *PURPLE* program logo:

- Any use of the *PURPLE* program logo in documents or marketing materials requires approval from the NCSBS prior to distribution. Please contact the *PURPLE* Team at 801-447-9360 ext. 1 or PURPLE@dontshake.org to get your materials approved;
- When resizing the logo, the proportions of the logo must be maintained to guard from distorting the logo in any way;

Acceptable

Unacceptable

- The logo cannot be manipulated in any way, such as moving pieces of the logo to fit a specified space in your promotional communications;
- A white version of each logo (Figure 5) may be used when placed upon a dark background;
- Use of the logo on any print material requires the use of a high resolution logo, not a scanned or low resolution logo. To obtain a high resolution logo, please contact the *PURPLE* Team at 801-447-9360 ext. 1 or PURPLE@dontshake.org; and
- The logo cannot be used in combination with programs that have competing messages with the *PURPLE* program. Please see above section Use of the *PURPLE* program with competing messages for details.

Referencing the *PURPLE* Program in a Document

The *Period of PURPLE Crying* program is often referred to in a number of different ways. We understand that having to continuously refer to the program as “*Period of PURPLE Crying*” can be cumbersome, so we have approved the following two (2) phrases to be used in its place when necessary:

- *PURPLE* program;
- *PURPLE Crying* program.

Formatting of the approved phrases should be as consistent as possible. Please note the following:

- Use of the phrase "*Period of PURPLE Crying*" is italicized when displayed in print form;
    - The phrase "*Period of PURPLE Crying®*" is a registered trademark, so we ask that the phrase be accompanied by the registered trademark symbol "®" in the first instance only. Subsequent use of the entire phrase does not require use of the registered trademark symbol;
    - When using the phrase "the *Period of PURPLE Crying*," the word "the" is neither capitalized nor italicized. Only the phrase "*Period of PURPLE Crying*" is both title case and italicized; and
- The word "*PURPLE*" appears in all caps and italics when displayed in print form;
    - *PURPLE* is an acronym, so it should always appear in all capital letters.

The Three (3) Dose Format

Communications about the *PURPLE* program may include reference to the Three (3) Dose Program strategy used for widespread distribution of the *PURPLE* program and its messages.

The doses when used in conjunction with the number to which it refers are part of a title, therefore, the word "Dose" and the number "One, Two or Three" should be capitalized when used together to reference the dose (ex. "Dose One", "Dose Two" or "Dose Three").

When referencing any of the three (3) doses you may either spell out the number (Example; One, Two or Three) or you may use the number itself (Example: 1, 2 or 3). However, the document or presentation in which the doses are referenced should maintain the same formatting throughout. For example, if the beginning reference states "Dose One", subsequent references to the doses should state "Dose One", "Dose Two" and "Dose Three". Please do not reference "Dose One" then refer to it as "Dose 1" later in the document or presentation.

Website Usage

Use of the *PURPLE* program logo and other images associated with the *Period of PURPLE Crying* program such as the cartoon parents and the *PURPLE* acronym may be displayed on your webpage under the following conditions:

1. You adhere to the guidelines above specified for use of the *PURPLE* program logo and approved references.

2. The NCSBS requests final approval of the copy that will accompany the *PURPLE* program images on the website prior to publishing the site online.

(NCSBS) *PURPLE* Program Videos on YouTube

The NCSBS hosts a series of professionally produced film vignettes and commercials on its YouTube channel that you may want to use on your website. These videos include:

- The creator of the *PURPLE* program, Dr. Ronald Barr, MDCM, FRCPC discussing "What is the *Period of PURPLE Crying*®"
- Vignette of a single mother's crying infant disturbing the neighbor
- Vignette of a mother and father arguing about their crying infant
- Vignette of a grandmother wondering why the grandbaby cries more than her others
- 10-, 15- and 30- second *PURPLE* television ads
- Clips from the *PURPLE* video

The NCSBS is happy to allow the use of these videos for display on your website and would prefer that you use the embed codes through the YouTube site to show these videos on your website rather than having the NCSBS provide you with the film file. You need to register an account with YouTube in order to get the embed code, and the registration itself is free. Please talk to your website administrator to discuss the details on how you can embed videos on to your website.

The NCSBS is happy to share links between your completed and approved website and the *PURPLE* program website located at **www.PURPLEcrying.info** as well as at our organizational site located at www.dontshake.org. You can request the sharing of links during your website's approval process.

PURPLEcrying.info Website URL

When referencing the **PURPLEcrying.info** URL please use the following guidelines:

- Always capitalize the letters in the word "PURPLE" (see the section Referencing the *PURPLE* Program in a Document above for more information);
- When possible, use boldface formatting and use a purple color that closely matches the *PURPLE* color settings referenced above in the section *PURPLE* Color Settings;
- The "www." prefix used before the URL does not need to be included.

Acceptable uses of the **PURPLEcrying.info** URL include:

Preferred:

PURPLEcrying.info www.PURPLEcrying.info

Acceptable:

PURPLEcrying.info www.PURPLEcrying.info
PURPLEcrying.info www.PURPLEcrying.info

Requests for Exception

The NCSBS understands that it may be difficult to adhere to every policy as stated in this branding policy and encourages users of the *PURPLE* program brand to closely follow the guidelines in order to convey clear and consistent messages. The NCSBS realizes that there may be instances where users may ask for exceptions to following the branding policy set forth

While the NCSBS expects these cases to be rare, the NCSBS asks you to contact the *PURPLE* Team at 801-447-9360 ext. 1 or PURPLE@dontshake.org. Users should be prepared to explain the circumstances in detail as to the reasons needed to excuse the *Period of PURPLE Crying* program branding policy.

CHAPTER 12

PARENT WEBSITE

PURPLEcrying.info is a parent support website developed by the National Center on Shaken Baby Syndrome (NCSBS) to provide accurate, timely, evidence-based information on a variety of child development topics. All of the articles on the website are written and prepared by experts renowned for advancements in child development in their respective fields of study.

Landing Page of PURPLEcrying.info

The child development topics addressed on the website include:

- Sleeping
  - What we know about normal infant sleeping
  - Preventing or managing infant sleep problems
  - Treating sleep problems once they arise
- Soothing
  - Common features and principles of soothing
  - Common sense and well-tried soothing methods

    - Soothing methods to avoid
- Crying
    - Why we know increased crying in the first few months is normal
    - Why babies cry more at this point in their development than any other time
    - How we know this increased crying isn't related to illness or injury
    - What is Colic
    - Other important information about infant crying
- Protecting
    - Parenting well when emotions run high
    - Myths about good parenting
    - Tips to deal with frustration and anger
    - Selecting someone to care for your baby
    - What to expect from a child care provider
    - Child care providers expectations of you
    - Shaken baby syndrome (SBS)
    - The relation of crying to SBS
    - Commonly asked questions
- For dads
    - Fatherhood: Challenges and rewards of caring for infants
    - Are mothers and fathers interchangeable?
    - Getting dads more involved
    - Fatherhood: When the worries settle in
    - Becoming attached to your new baby
    - The military dad: dealing with deployment

The website also contains information specifically about the *Period of PURPLE Crying®*, namely a description of the program, lines of evidence leading to the program's development, evaluation and steps to implementation.

The PURPLEcrying.info website has been designed to provide a visual and interactive educational experience. Videos and image slide shows are used throughout the site to help reinforce the information that has been prepared to address each child development topic. These visuals also provide parents and caregivers with a modern and efficient way of accessing information that is relevant to the needs and concerns that parents and caregivers have for their infants.

CHAPTER 13

CONTACT INFORMATION

National Center on Shaken Baby Syndrome
1433 North 1075 West, Suite 110
Farmington, Utah 84025
Phone: 801-447-9360
Fax: 801-447-9364
Email: mail@dontshake.org
Web: www.dontshake.org

Period of PURPLE Crying **Team**
801-447-9360 Ext. 1.
Fax: 801-447-9364
PURPLE@dontshake.org

Ongoing Program Consultations

The NCSBS will provide a *PURPLE* staff member to guide organizations through the implementation process, provide full access to complimentary Online Training Modules, and keep a shared Fidelity Agreement on file stating an understanding of the program protocol, purchasing procedures, program updates, ongoing support and overall guidance.