Our research has shown that hospital facility dogs are effective in "alleviating the pain of terminal illness" and "promoting a positive attitude toward treatment" in children hospitalized for serious illness.

Our significant research conducted at Shizuoka Children's Hospital in Japan has been published in the international academic journal, PLOS ONE.

Specified Nonprofit Organization Shine On! Kids June 1, 2023

The research paper was co-authored by the specified nonprofit organization Shine On! Kids (Tokyo: Kimberly Forsythe, President), that supports children with cancer and other serious illnesses in Japan, Shizuoka Children's Hospital (http://www.shizuoka-pho.jp/kodomo/english/), and Kansai University (https://www.kansai-u.ac.jp/English/?stt_lang=en), and it has been published in the international academic journal, PLOS ONE. This study revealed that hospital facility dogs support palliative care especially in the terminal period and promote positive attitudes among hospitalized children with serious illnesses. This has been acknowledged by the clinical workers who care for these children and evidenced by the data collected through this research project.

Research Title

"Exploring the benefits of full-time hospital facility dogs working with nurse handlers in a children's hospital"

Publication: PLOS ONE

DOI: https://doi.org/10.1371/journal.pone.0285768

Authors: Natsuko Murata¹, Keiko Suzuki¹, Yuko Morita¹, Minobe Harumi², Atsushi Mizumoto³, Shiro Seto²

¹Specified nonprofit organization Shine On Kids

² Shizuoka Children's Hospital

³ Kansai University



Facility dog, Yogi, visiting a patient at Shizuoka Children's Hospital during the research period. Patient (L) and their mother (R).

Research Highlights

- For the first time, we were able to systematically document that facility dogs enhance "palliative care during the terminal period" and "patient cooperation with treatments and procedures" which are often painful and frightening among patients at a children's hospital.
- This is the first study of its kind in the world to comprehensively and quantitatively survey medical staff in cases where a facility dog and a qualified nurse handler are on full-time duty.
- The paper was published in PLOS ONE, an international open-access scientific journal, with the aim of raising awareness of facility dog activities through research in children's hospitals in Japan and around the world. The data and analysis codes used in the study are also available on OSF (Open Science Framework https://osf.io/hxktc/)



Bailey, Yogi's predecessor and the first hospital facility dog in Japan, accompanies a patient for a bone marrow aspiration with a nurse and a child life specialist.

Research Overview

- An anonymous questionnaire was used to survey all 626 medical staff members at Shizuoka Children's
 Hospital. Responses were received from 431 (69%), of whom 270 had observed hospital facility dog
 activities and were included in the analysis. Nine questions were answered on a 5-point Likert Scale (5
 being the highest rating), with an additional comment section.
- The highest rated item was "palliative care during the terminal period" with 73%, 56 out of 77, reporting that they "often" or "always" felt the benefits of the program. It was also notable that no respondents said that they "did not feel any benefit."
 - Another highly rated item was "it made it easier to get patient cooperation" during invasive procedures and examinations. 73%, 140 out of 193, indicated that they "often" or "always" felt the impact. There was no statistical difference according to the respondent's job title, years of clinical experience, or whether or not the respondent had owned a dog when responding to both "palliative care during the terminal period" and "it made it easier to get patient cooperation." Painful and invasive procedures, such as bone marrow aspiration and accompanying patients to the operating room, were mentioned in the free comment section as examples of such procedures.
- Further research into the benefits of the full-time activities in pediatric healthcare facilities will help us to develop more timely and effective interventions, identify optimal operational methods that meet the needs of the facilities in which they are implemented, and clarify the medical benefits of facility dogs.



The most highly rated item was "palliative care during the terminal period", and 23 out of 270 respondents (9%) filled out the comment section. The above are excerpts from Table 4 of the paper.

■ About Our Hospital Facility Dog Program

A "hospital facility dog"— a dog that has been specially trained to work in a children's hospital — is paired with a "clinician handler," a medical professional who has acquired the knowledge and skills to work with hospital facility dogs. Shine On! Kids launched Japan's first hospital facility dog program in 2010 in partnership with Shizuoka Children's Hospital. The program is currently operating at four children's hospitals in Japan. The program offers wide ranging activities including interacting with hospitalized children, accompanying them during painful and anxiety-triggering examinations and procedures such as blood draws, accompanying them to the operating room, and sleeping with them when they are on bed rest.

■ About Us

Shine On! Kids supports children with cancer and other serious illnesses and their families through a variety of mental health care programs including the Hospital Facility Dog Program (animal assisted therapy), Beads of Courage[©] Program (arts-in-medicine), Camp Courage (led by a community of childhood cancer survivors), Shine On! Connections (online mental health care and learning support activities).

Specified Nonprofit Organization Shine On! Kids

Kimberly Forsythe, President

3-3-6 Nihonbashi-Honcho, Chuo-ku, Tokyo6103-0023, Japan +81-3-6202-7262 https://sokids.org/