Cancer Buddy Program to Improve Quality and Timeline of Head and Neck Cancer Treatment: a pilot study

Meghan N. Wilson, MD; Anne Kane, MD; Daniel W. Nuss, MD, Rohan R Walvekar, MD
Department of Otolaryngology, Louisiana State University Health Sciences Center, New Orleans

Abstract

Objective: Through this project, head and neck cancer patients are paired with medical students, designated as cancer “buddies,” who are a contact for questions, needs or problems that arise during treatment. The cancer buddies relay these issues to the treatment team, effectively bridging the communication gap between the patient and treating physicians. This serves as a pilot study to assess the feasibility of this project in order to plan a larger implementation.

Study Design: Prospective case series

Methods: Patients whose treatment plan involves radiation were invited to enroll in the Cancer Buddy program. Medical students contacted the patients twice weekly until completion of treatment. Treatment data and notes from the Cancer Buddy conversations were recorded.

Results: Three patients and six medical students have been enrolled the project. One patient underwent surgical resection followed by radiation; the other two patients underwent concurrent chemotheraphy and radiation therapy. One patient did have a break in radiation resulting from an acute illness requiring hospitalization; otherwise, no patients missed any appointments. Through this program, appointment conflicts could be identified and resolved prior to appointment absence. Medication needs could be assessed prior to the need for emergency room visits. Patient questions for the otolaryngology team could be addressed prior to the next scheduled clinic visit. Both the patients and the medical students found the program to be beneficial and offered suggestions for improvement.

Conclusion: The Cancer Buddy project is feasible and can be of benefit to the patient and to medical students participating in the project.

Introduction

Good outcomes in head and neck cancer require treatment compliance. Gaps in radiation therapy decrease locoregional control rates and survival. A 1.7% decrease in locoregional control per day of radiation treatment missed has been demonstrated.\(^1\) Locoregional control decreases by half when 14 or more days are missed.\(^1\)

Underserved and uninsured populations have decreased compliance and worse outcomes. Studies out of 3 major county hospitals have shown a 25-35% non-compliance rate with treatment.\(^2\,\(^3\)\)

Additionally, these studies have shown delays in initiation of treatment at a county hospital compared to an academic medical center in the same city.

At the Interim Louisiana Public Hospital, where this program is set up, 44% of patients have Louisiana Medicaid, 13% have Medicare and 43% have no funding at all.\(^4\) These patients often have decreased resources, little social support and little formal education.

Cancer Buddy Program

Goals:
Maximize resources for cancer patients
Minimize delays or breaks in treatment

Program:
The program pairs 1 newly diagnosed cancer patient with two medical student “buddies”, one junior (1st or 2nd year) and one senior (3rd or 4th year).
The cancer buddies contact the patient twice weekly. In addition to discussing how the patient is doing, the buddies will ask the patient “any problems?” “any missed appointments?” “do you foresee any missed appointments?” and questions regarding adequacy of nutritional intake.

Discussion, Conclusions and Future Directions

This is the first study that aims to combat problems of missed appointments and treatments in a “county” or “public” hospital. This study shows that this program is feasible and has identified ways to improve the program going forward to a larger implementation.

What is not quantifiable is the education received by medical students participating in this program. The experience gained working closely with these patients will enable them to provide better cancer care to their future patients.

This pilot study was beneficial in that it identified the limitations of the current program design. Many of our patients have difficulty with communication as a result of their disease. Development of additional methods of communication will be beneficial for these patients. Furthermore, developing avenues for patients to contact the medical student buddies in the event of unforeseen problems will enable more problems to be prevented and taken care of.

Future directions include both short and long term goals. Short term goals include grant funding to obtain dedicated cell phones for buddies with texting capability and secure email accounts. Long term goals are to study the programs effects on cancer outcomes, quality improvement and cost effectiveness.

We are currently projecting to enroll 12 cancer patients for our next leg of the program. Our hope is that we can get enough data in order to acquire grant funding which would go towards a better communication between buddies and students, as well as for a program coordinator who would be in charge of pairing our buddies with patients and tracking data. This would allow us for even larger expansion of the program.

Materials and Methods

This study was designed as a pilot study to determine the feasibility and limitation of its design. The pilot study’s findings will be used to design a larger study with the objectives of determining if the program can reduce treatment breaks and delays and if it improve quality of life for cancer patients.

Patient receiving radiation as part of their treatment plan were invited to participate. Medical student volunteers were recruited from the ENT interest group at the LSU School of Medicine in New Orleans. Medical student buddies recorded calls and conversation content. Patients and buddies completed a non-validated end of program questionnaire asking perceived benefits and limitations of the program.

Patient data was collected including demographic information, tumor site, stage and treatment plan. Time to biopsy, treatment and completion of treatment was collected as well as the number of missed appointment and missed treatments.

The quality improvement methodology plan, do, study, act was utilized to plan and complete this study.

Results

There were no missed appointments and no missed radiation treatments

The program prevented the following events
- missed appointment prevented by correcting address of the physician’s office
- necessary appointment identified as not scheduled
- 3 ER visits prevented (stoma getting smaller - made clinic appointment for following day, nausea - prescription called in, pain control - re-fill called in.

Other benefits of the program
- depression in one patient identified early and treatment initiated
- “buddies” able to provide general cancer and treatment information and answer basic questions.

Survey results showed unanimous enjoyment of the program amongst both patients and medical student “buddies”. Suggestions for improvement included increased methods of communication, especially for aphonic/asyphonic patients and for those with unreliable phone access.

References