SOCIAL INFLUENCES ON HAND HYGIENE

Diane Makovsky, BSJ, OTS
Karen Sladyk, PhD, OTR/L, FAOTA, Research Advisor
Lori Vaughn, OTD, OTR/L, Academic Advisor
Bay Path College, Longmeadow, MA

Problem Statement

- Hand hygiene is the single most important measure to prevent healthcare-associated infection (HCAI)
- Hand-hygiene compliance continues to be global problem in all social group settings – not just healthcare

Retrieved from Google Images

Factors Influencing Non-Compliance

- Workload, too busy
- Forgetfulness
- Lack of awareness of risk
- Social disincentive
- Lack of social role model
- Lack of external reinforcement
- Lack of accessibility to facilities, supplies
- Aversion to/dislike of sanitizer
- Skin irritation

Research Questions

- RQ1: Can hand-hygiene behavior of eighth graders be influenced through an intervention of:
  - Scientific data
  - Visual *germ* demonstration
  - Proper hand-hygiene lesson?
- RQ2: Will there be a measurable change in students' self-reported attitudes and behaviors toward hand hygiene pre- and post-intervention?

Sample and Measures

- Convenient sample of entire eighth grade of a Massachusetts public middle school ($N = 73$)
- Consumption of hand-sanitizing wipes in grams per school day prior to and post intervention
- Students' self-reported opinions, attitudes, and behaviors prior to and post intervention by survey

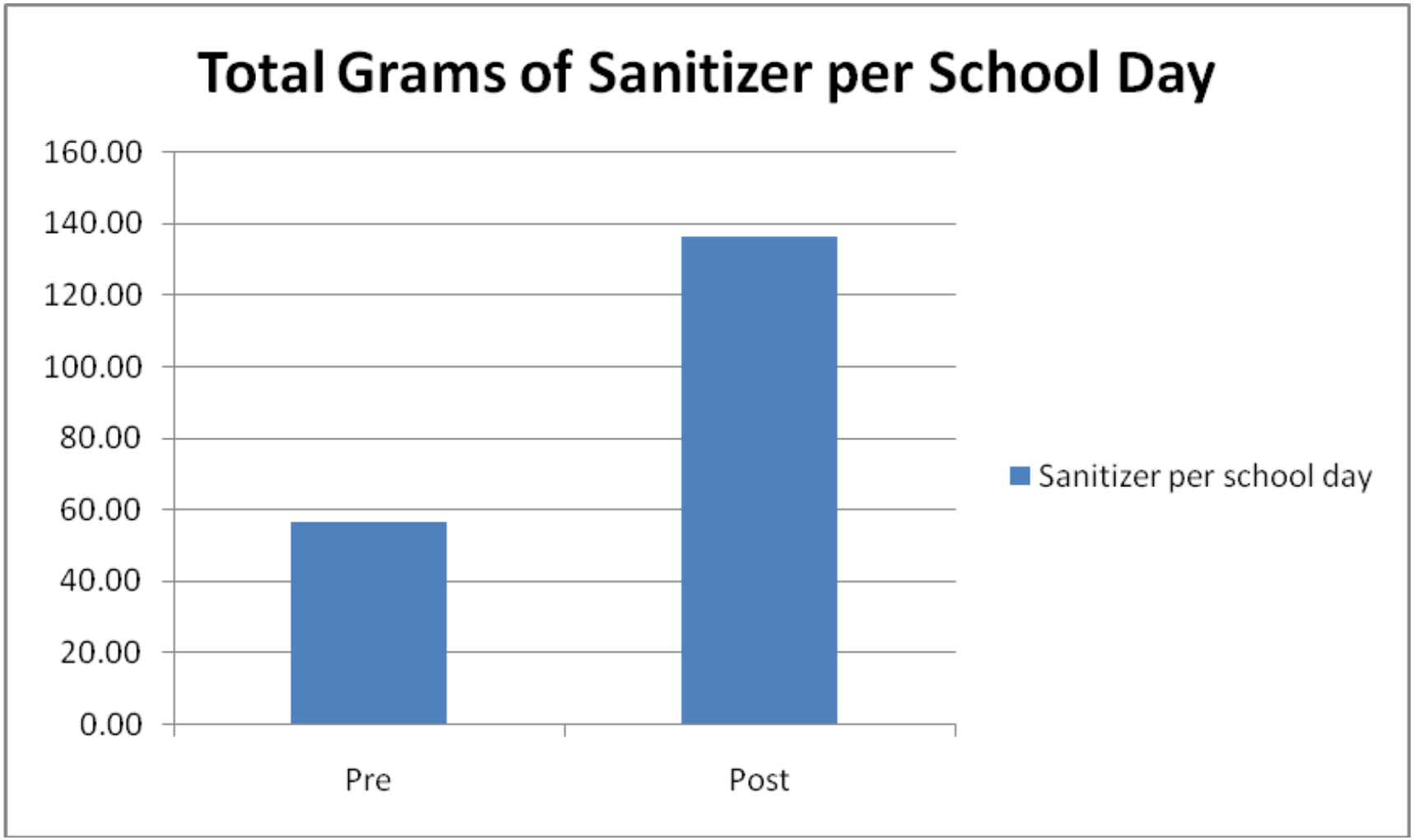
Results

- Pre- and post-intervention behavior measured by use of hand-sanitizing wipes was significant ($p = .034$)
- Of respondents, 47.8% said they changed their behavior and 44.9% said they changed their attitude
- Strong and significant correlations:
  - Between changing behavior and changing attitudes ($r = .71$, $p < .001$)
  - Between changing one's own behavior and talking about the topic to others ($r = .365$, $p = .002$)
  - Between changing one's own attitude and talking about the topic to others ($r = .35$, $p = .003$)

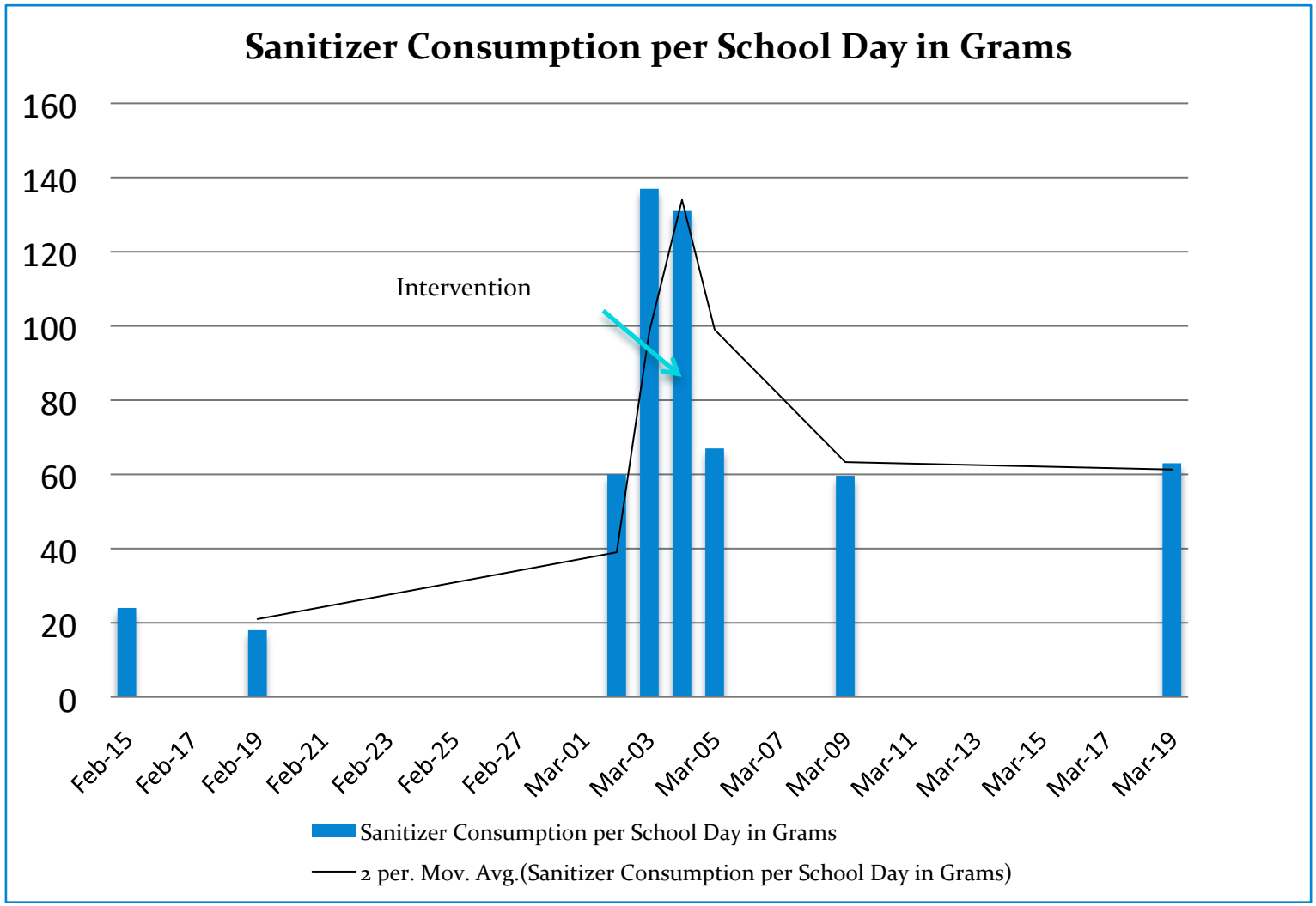
Results

- Of the population, 7% reported obtaining and using individual hand-sanitizer bottles during the course of the study
- The population reported the following would have improved their use:
  - Increased distribution of sanitizer
  - Better access to sanitizer supplies
  - More verbal and visual reminders
  - Extending the duration of the study

Increase in Mean Use



Large Initial Effect and Decay



Discussion

- A straightforward intervention can improve hand hygiene and, while there is a recency effect, there appeared to be a longer-term residual effect on students' behavior
- Repeated interventions are called for in order to bring about a society-wide change of behavior
- By raising the topic of hand hygiene in day-to-day conversations with clients and caregivers, all **occupational therapy practitioners** can contribute to a large and important social transformation

Limitations

- Small sample size (73 students)
- Sample was not obviously representative of Massachusetts' eighth grades as a whole
- Sample was not controlled for cultural diversity or for socioeconomic status
- Short duration of the study
  - Quantitative measurements 5 weeks; qualitative 3 months
- No attempt to measure direct effect on absenteeism or health among the students

- For references, see handout

Sanitizer Used per School Day

	Date	Sanitizer Used per School Day, in Grams
Pre	Feb-18	24
	Mar-01	18
	Mar-02	60
Post	Mar-03	137
	Mar-04	131
	Mar-08	67
	Mar-18	59.625
	Mar-24	63