



## Using the marshmallow test to predict jail time

BY W. GIFFORD-JONES, MD

WHEN was the last time you said, "Let's roast some marshmallows"? Since I'm not sweet 16 it was a lot of moons ago for me. Now, a report from Stanford University shows marshmallows are good for more than enjoying them around a fire. It seems how you handle a marshmallow can tell how you handle other things later in life. In fact, it may even decide if you end up in jail.

Walter Mischel, professor of psychology at Stanford University, carried out a number of interesting experiments on marshmallows. He tested 653 young children four years of age who all loved marshmallows.

The four year olds were placed one at a time in a single room containing only a desk and chair. Each child was then given a marshmallow and told they could either eat the marshmallow right away, or, if they waited for 15 minutes without eating it, they would be given a second marshmallow.

A video showed how they struggled to delay instant gratification. Some kept looking at the marshmallow, or touched it, and then sucked their finger. Others made a series of facial expressions, wondering what to do. Still others buried their heads in their hands or peaked out of one eye looking at it, kicked the desk, or tugged on their pigtales.

Mischel reports that, "A few of the kids ate the marshmallow right away." Only 30 per cent found a way to resist the temptation and received their second marshmallow.

The initial purpose of the experiment was to determine how a child's mental processes would allow some to delay instant gratification. And to study why some children could wait for a second marshmallow.

But the goal of the study was expanded several years later. Mischel decided to track down many of the 653 children who had participated in the earlier study. The purpose was to find out if there was any correlation between those who quickly ate the marshmallow and those who delayed doing so.

Mischel's questionnaire included every human trait he could think of, such as the ability to plan ahead, how they got along with their peers, or whether they had a criminal record. He also requested their S.A.T. educational scores.

So what did he find? He discovered that those who quickly ate the marshmallow were more likely to suffer from behavioural problems both in the home and at school. They had



THE DOCTOR GAME

trouble paying attention, struggled in stressful situations and found it difficult to maintain friendships. And it increased the chance of having a weight problem, trouble with drugs and being convicted of a crime.

Those children who could wait for 15 minutes had an S.A.T. score that was, on average, two hundred and ten points higher than children who could wait only 30 seconds. They were also more likely to come from high-income families, save for their retirement and study rather than watch TV.

Mischel's experiment concluded that all the children wanted the marshmallow, so what determined self-control? The key, he says, was to avoid thinking about it in the first place. So the successful children avoided staring at the tempting marshmallow, sang songs from Sesame Street, or busied themselves otherwise.

Mischel says adults do the same thing to outsmart their shortcomings. For instance, Odysseus knew he couldn't resist the Siren's song so he tied himself to the ship's mast. Mischel's advice for the rest of us is that the best way to avoid the Siren's song is to avoid it. And that what we call will power has nothing to do with the will.

One U.S. school, KIPP Academy in Philadelphia, reminds its students that self-control is one of the fundamental "character strengths." To stress this point they receive a shirt emblazoned with the slogan "Don't eat the marshmallows."

Today, the lack of self-control and the need for instant gratification has caused much of the world's economic, financial and social woes. Maybe it's time for parents to conduct the marshmallow test on their children. And to ensure a better world, it's time to provide marshmallows to politicians who believe that taxpayers' money grows on trees.

*The Doctor Game runs each Tuesday in The Chronicle-Journal. Dr. Ken Walker (aka W. Gifford-Jones) has a private practice in Toronto. Please send comments to info@docgiff.com or visit docgiff.com.*



SUBMITTED PHOTO

Pictured, left to right, are three of the QPC-LTC PSW leads: Stella Jamison (southern Ontario), Lina Moore (Hogarth Riverview Manor), and Jackie McDonald (Bethammi Nursing Home).

## PSW job competency development

*Editor's Note: This article is the fourth in a series related to age research being conducted within Lakehead University's Centre for Education and Research on Aging & Health (CERAH).*

BY JACKIE MCDONALD AND MARG MCKEE

RESEARCHERS at Lakehead University, in partnership with a group of personal support workers (PSWs) from St. Joseph's Care Group, Bethammi Nursing Home and Hogarth Riverview Manor have undertaken a ground-breaking initiative to develop a set of Palliative Care Competencies for personal support workers who work in Long Term Care (LTC) homes.

The Competencies are an effort to document and describe the role and scope of practice of PSWs who provide care to frail elderly people at the end of life. The research is an important step in raising awareness among PSWs and other members of the palliative care team in long term care of the value and complexity of care PSWs provide. A better understanding of the PSW role and scope of practice contributes to improved communication and collaboration among members of the team, facilitates developing education initiatives to support PSWs in their role, and supports more consistent standards of care for residents.

The PSW competency study is part of a five-year Social Sciences and Humanities Research Council funded research project led by Dr. Mary Lou Kelley of Lakehead University entitled "Improving Quality of Life for People Who Are Dying in Long Term Care Homes" (For details please see the website [www.palliativealliance.ca](http://www.palliativealliance.ca)). Two local LTC homes, St. Joseph's Care Group Bethammi Nursing Home and Hogarth Riverview Manor, are participat-

ing in this research project.

One objective of this project is to empower the PSWs who provide the majority of hands-on bedside care to residents. Dr. Marg McKee from the Lakehead University School of Social Work led the competency research and worked directly PSWs.

LTC homes have changed over the last decade to care for increasingly frail elderly people with complex care needs. Since LTC becomes a resident's home, it is important to offer residents the opportunity to die "at home" in familiar surroundings. The complexity of the PSW role has changed to provide care to the end of life. Their skill set consists of: personal care, relationship building, ongoing observations, care of the family, care at end-of-life, creating a safe, home-like environment, care of the residents after death, communication with staff and family, time management skills, teamwork skills, self-care, professional development, and advocacy for residents.

Jackie McDonald one of the research project PSW leads from Bethammi Nursing Home has been working with the research project for four years and recently spoke about the competencies at a provincial conference. Jackie emphasized the sense of personal and professional empowerment she gained from the research.

She also spoke about how the PSW Competencies have contributed to a greater understanding and appreciation of the PSW role in the long term care home. It is work that not everyone can do. PSWs must be compassionate and dedicated, and respectful of the dignity and wishes of a resident. They must also be knowledgeable and highly skilled.

When a resident of long-term care transitions to need palliative and ultimately end-of-life care, the PSW needs to know and understand the process of dying. He or she must be skilled in responding to the com-

plex, changing care needs of each resident and their family members throughout the dying process, and even afterwards. Time management, team building and the ability to communicate are all essential skills of the PSW who works in LTC. A PSW must have the ability to build relationships with numerous residents and their family members. They must be resilient, aware of their limits, and continually practice self-care. The PSW must be a skilled advocate for residents, family members and loved ones. Building on their understanding of the procedures and policies of the LTC home where they work, PSWs must work collaboratively with other team members and within organizational constraints to provide the best care possible for their residents.

A PSW position is physically and emotionally demanding, and yet spiritually rewarding. PSWs must constantly be upgrading their knowledge and skill in palliative and end-of-life care, and always looking for ways to mentor new PSWs.

Jackie indicated that the PSW Competencies project have empowered the PSWs in the LTC home where she works. The PSWs report an increased feeling of respect and in being a valued member of the health care team. They have rallied and advocated on behalf of residents and their voices have been heard.

They are excited about the potential for the PSW Competencies to help guide curriculum development and educational opportunities for PSWs, and to empower PSWs to believe in their value, their profession and the importance of the work they do.

*Jackie McDonald is a PSW from Bethammi Nursing Home and the QPC-LTC lead for Bethammi Nursing Home. Marg McKee is an associate professor with the School of Social Work at Lakehead University.*

## Sudden death in young adults not caused by exercise, study suggests

THE CANADIAN PRESS

TORONTO — The stories are always shocking: A young, often super fit teenager or young adult drops like a stone during an athletic event, dead before they hit the ground.

The obvious incongruity of sudden cardiac death in an athlete perplexes the public and alarms parents of young sportsmen and sportswomen, who may see their own children in the lifeless bodies of the stricken.

A new Canadian study may relieve some of those concerns. It finds that the majority of sudden cardiac death cases don't happen during exercise, at least in young adults.

In fact, the highly visible deaths of athletes — or the deaths averted because of rapid resuscitation, as in the cases of former NHL player Brett MacLean or Premier League footballer Fabrice Muamba earlier this year — are the exceptions. Most sudden cardiac deaths happen off the field of play, among people who are not exerting themselves.

That's important to know, not just because of the relief it may provide some parents. Targeting heart resuscitation equipment — such as automated external defibrillators or AEDs — at sporting events probably isn't the best use of the resources, says Dr. Andrew Krahn, a cardiologist in the medical school of the University of British Columbia and one of the authors of the study.

"If we're going to try to prevent this problem, we need to be aware that the problem is not a sports problem. The problem is really an infrequent but tragic death that happens usually at home and usually at rest," says Krahn.

"Putting it (an AED) at the Y is a sensible thing to do, but not at the exclusion of putting it at the mall. Or the school."

The study is being presented Monday in Toronto at the Canadian Cardiovascular Congress, a scientific meeting co-hosted by the Canadi-

an Cardiovascular Society and the Heart and Stroke Foundation.

The findings suggest training people in CPR (cardiopulmonary resuscitation) and making AEDs available in more public places could save more people from sudden cardiac deaths, says Dr. Beth Abramson, a Toronto-based cardiologist and researcher funded by the Heart and Stroke Foundation.

"Our goal is to make AEDs as available as fire extinguishers in public places from Yellowknife to St. John's," Abramson said in a statement. "The odds of surviving a cardiac arrest can increase to up to 75 per cent when early CPR is used in combination with an AED in the first few minutes."

She notes the importance of a rapid response was demonstrated this summer when MacLean suffered a cardiac arrest while playing a pick-up hockey game in Owen Sound, Ont. Players performed CPR and a spectator ran for the arena's AED. MacLean survived, though his professional hockey career is over.

Krahn, who until recently lived in Toronto, worked with colleagues to identify cases of sudden cardiac death among coroners' reports in Ontario. They looked at 174 presumed cases that occurred in 2008 in people aged two to 40. (Sudden cardiac death doesn't happen exclusively to the young, but for the purpose of the study the researchers wanted to focus on children and young adults.)

Up to 40,000 Canadians of all ages die of sudden cardiac arrest each year, according to the Heart and Stroke Foundation. Krahn says the Ontario numbers suggest that nationwide about 500 to 700 young people die this way each year.

Three-quarters of the sudden cardiac death victims in Krahn's study were between the ages of 18 and 40. And the majority of the deaths — 72 per cent — occurred at home. Only nine per cent of the adult deaths occurred during moderate or vigorous exercise.

## Mandatory flu shots for hospital workers: Journal

THE CANADIAN PRESS

TORONTO — The Canadian Medical Association Journal has added its voice to calls for mandatory flu shots for health-care workers.

In an editorial published in this week's issue, the journal said hospital workers ought to be vaccinated to safeguard frail, elderly patients whose immune systems are so weakened they don't get much protection from a flu shot themselves.

"We would like individual hospitals to think about taking the initiative," said Dr. Ken Flegel, senior associate editor and a general internal medicine specialist at Montreal's McGill University Health Centre.

Flegel acknowledged there will likely be pushback from health-care workers, the majority of whom do not get a flu shot.

"I don't want anyone to make me do something I don't believe in or I don't agree to do to my body," he said.

"I think that's a sort of fundamental right. On the other hand, I think the hospital has to say 'That's fine by us but don't come near our patients because you're a hazard to our patients.'"

In recent years there has been a growing movement towards requiring health-care workers to take a flu shot, especially in the United States. Earlier this year British Columbia became the first Canadian jurisdiction to require health-care workers to be vaccinated against the flu.

The B.C. policy applies to hospital workers, staff of long-term care homes and community-based health-care workers. It does not cover doctors in private practice.

Health-care workers who forgo a flu shot will have to wear a mask on the job from Dec. 1 to the end of March.

Dr. Perry Kendall, the province's chief medical officer of health, said health-care worker vaccination rates — which were never high — have been dropping since 2007.

"If we really think it will make a difference, why do we keep on sitting on the fence and accepting declining levels? It either is important enough to really do it or it isn't," Kendall said.

Health-care unions, which had supported B.C.'s efforts to raise flu shot rates among members, were not happy about the new policy.

"They would rather it is a voluntary program and so would I, frankly. But that just hasn't worked," Kendall said.

The call to make flu shots mandatory comes at a time when serious questions are being asked about how effective flu vaccine actually is. And some of the studies the journal editorial cites in making its case are among those that have been called into question.

It suggests, for instance, that flu vaccine is about 86 per cent effective at preventing flu when the strains in the shot are well matched to circulating viruses. But the study cited as the source of that information doesn't actually make that claim. Flegel said he got the number from another study, which credited the study Flegel cited.

A recent comprehensive review of influenza vaccine written by the Center for Infectious Disease Research and Policy (CIDRAP) at the University of Minnesota said the

scientific literature on flu vaccine is littered with mistakes — studies that misconstrue what previous research has found or which have design flaws.

The result has been an over-estimation of how much protection current flu vaccines can offer, the CIDRAP report said.

In the last couple of years many expert groups have quietly toned down their language on flu shots, lowering the efficacy estimates to 50 to 70 per cent from the 70 to 90 per cent that was previously claimed.

(It should be noted the studies that assess efficacy are typically done in healthy adults, the people whose immune systems are most likely to respond well to a flu shot. That means those efficacy estimates are a best-case scenario.)

Michael Osterholm, senior author of the CIDRAP flu vaccine report, said public health officials need to be careful not to over sell flu vaccine.

"I fully support the vaccination of health-care workers. But we must be held to a standard of science that we expect anyone who opposes vaccination to also be held to," he said.

Flegel acknowledged that may be a problem. "We probably have been too enthusiastic about the protection rate available from the flu vaccine," he said after learning of the problem in his citations.

But he said even if the vaccine offers only 50 per cent protection, minimizing the risk that health-care workers sick with the flu will pass it to their vulnerable patients makes sense.