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Pickleball:

Participation, passion and fractures on the rise

Pickleball is increasingly a 'must-have' amenity in communities and community centers serving active agers today. So, too, are the trainers and coaches needed to help individuals play safely

by Marilyn Larkin, MA

"Hot Topic!" is a new column by longtime Journal on Active Aging® Contributing Editor and columnist Marilyn Larkin. Her deep understanding of the active-aging industry will inform this column, which will explore timely, thought-provoking and relevant topics. Larkin invites readers' input (see the box on page 34).

Pickleball has taken the United States,¹ Australia,² and, well, the world³ by storm, making the sport a compelling topic for this column even though I haven't played it myself. In the US alone, participation increased 52% between 2022 and 2023, to 13.6 million players.⁴ And, in Canada, several cities have emerged as pickleball hotspots,⁵ including Kelowna and Victoria, two small cities in British Columbia, and Toronto, capital of Ontario and Canada's largest city, to name a few.⁵ What's more, players ages 55 and up were the largest age bracket of pickleball players in 2021,

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comprising 19.8% of total US participants,⁴ recent statistics show.

But all that participation, while mostly beneficial for people of all ages, also comes with some cautions for older players. Let's look at the current pickleball landscape for active-aging settings.

What's the draw?

Widely described as a combination of tennis, badminton and ping pong, pickleball is played with a paddle and a plastic ball on a smaller court than tennis. Experts attribute its rapid popularity to factors such as the ease of play, the low cost of entry and the social aspects of the sport, according to a recent article on CNBC online. Pickleball can be learned quickly—often in just a few les-

sons—and players can find tournaments at varying competitive levels. Cost is also a factor; pickleball generally is more affordable than tennis or golf.⁶

But Clint Soppe, MD, a California orthopedic surgeon and sports medicine specialist at Cedars-Sinai Kerlan-Jobe Institute, Los Angeles, told the *Journal on Active Aging*[®] that the number-one reason for the surging participation is simple: "It's fun!"

Soppe, who also consults for the LA Galaxy professional men's soccer club, says, "From a skill level perspective, compared to tennis (which I play regularly), people can improve very quickly in pickleball and start competing. It's also a great way to get involved with a

community of all different ages," he continues. "The social benefits have been particularly strong coming out of the pandemic. And of course, it gets people active, moving, and exercising."

Soppe's patients are more likely to be consistently active when they're engaged in pickleball. "One of the most difficult things for people of all ages is finding a sport or an activity they will be consistent with," he observes. "Many times, they'll get on an exercise program at the start of the year, stay with it for a couple of months, then lose interest. That's unlikely to happen with pickleball." Soppe explains, "Here in California, I have patients who play outdoors most of the time, all year round. But I grew up in Texas, where it gets very hot in the sum-

mer, and we had large indoor facilities that were packed with people having a lot of fun.”

Injuries skyrocketing

Unfortunately, all that fun often does come with a downside—namely, injuries. A study presented last year at the American Academy of Orthopedic Surgeons annual meeting found a 90-fold increase in pickleball-related fractures from 2002 to 2022, with fractures more than doubling since 2020.⁷ “As the sport of pickleball gains popularity, fractures have skyrocketed,” the study authors write. Most common are upper-extremity fractures in women ages 65 and older following a fall.

An article on the sport published last year in *Business Insider*⁸ cited UBS Group analysts, who estimated in a report that up to USD\$500 million of 2023’s medical costs would be attributable to pickleball, as well as 66,750 emergency department visits and 366,186 outpatient doctor visits. One reason for the high medical costs, according to UBS, is that older adults make up one-third of pickleball’s “core players”—that is, those who play at least eight times a year.

Soppe said he has seen an uptick in injuries in his practice among his older patients. “I do think there’s a potential increased risk, especially if they’re not used to doing a higher impact or high-intensity type of activity that involves moving quickly and using fast-twitch muscles that increase load and tension across the joints.”

Injuries that have increased among his patients who play pickleball include:

- anterior cruciate ligament (ACL) and meniscus injuries in the knee
- rotator cuff and other types of injuries in the shoulder
- traumatic injuries and fractures from twisting an ankle
- falls that lead to various upper-extremity fractures

“I’ve done surgery for ACL reconstructions on patients over 65 years old, which typically is pretty rare,” Soppe notes. “But these people want to continue to be active and they need an ACL so they can do side to side-cutting activities like pickleball.”

Neuromotor requirements

“Pickleball is what we call a neuromotor activity,” comments Ryan Glatt, CPT, NBC-HWC, senior brain health coach and director of the FitBrain Program at Pacific Neuroscience Institute in Santa Monica, California. “That means it’s similar to other racquet sports, as well as dance or martial arts, compared to, say, aerobic exercise or resistance training. While pickleball can have aerobic benefits, it’s primarily a neuromotor sport because of its demands on skills such as dynamic balance, hand-eye coordination, reaction time, and spatial orientation.”

Glatt, a past presenter at the International Council on Active Aging Conference, continues, “Players might be stepping in different directions. They might be reaching for a ball. They might be going through a process called motor planning, as they need to predict where they’re going. They have to have what’s called ‘impulse control’ in place—that is, they need to be able to control their impulses to execute a backhand or forehand swing. They have to anticipate where the ball is coming from and what their opponent will do. And they have to communicate with their team members if they’re playing doubles.”

All those moves require what’s called open-skill training, which is more unpredictable than closed-skill training, like working out on a machine or treadmill, Glatt explains. “The open-skill acquisition process, even though it can cause some frustration, is a way of learn-

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Resources

Internet

Cedars-Sinai Kerlan-Jobe Institute

<https://kerlanjobe.org/>

Pacific Neuroscience Institute: FitBrain

www.pacificneuroscienceinstitute.org/brain-health/lifestyle/fitbrain/

Additional websites

Association of Pickleball Players

www.theapp.global

National Senior Games

Association: Pickleball and Non-Ambulatory Pickleball

<https://nsga.com/pickleball>

<https://nsga.com/non-ambulatory-pickleball>

Pickleball Canada

<https://pickleballcanada.org>

Pickleheads (official court and game finder of USA Pickleball)

<https://usapickleball.org/places-to-play>

Professional Pickleball Association

www.ppatour.com

USA Pickleball

<https://usapickleball.org>

US Senior Pickleball

www.usseniorpickleball.com

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ing that's actually quite good for the brain," he notes. In fact, some research has shown that open-skill training for activities such as racquet sports may enhance cognitive function more than closed skills.⁹

That benefit is particularly important for Glatt's clients who have cognitive issues, as well as healthy older adults. Working in a one-on-one context or in groups, he focuses on "dual tasking"—that is, doing one activity that's physical, like a dynamic balance exercise, and one that's cognitive, such as responding to a number, at the same time. "This type of training can help prepare people for the cognitive and physical demands that are simultaneously occurring during an activity like pickleball," he says. "For example, I have them step out in different directions in response to a visual stimulus such as a ball on a screen, at

varying speeds. They need to respond to the visual stimulus immediately with the appropriate action."

Provide injury prevention programs, support

As a physical therapist, Glatt has found that orthopedic injuries, mainly from overuse, are common among the people he works with. "Many of us know at least one person in our lives who is kind of addicted to pickleball," he says. "They're wearing 20 different braces and bandages because the shoulder and the knee are being overused, for example. That's true for anyone who either doesn't train for their sport or overdoes the sport."

Like Soppe, Glatt also points to the risk of falls, which have happened even among individuals who would not normally be considered at risk. "People may become distracted by their teammates or the ball, and they forget to focus on stability," he comments. "When people get competitive and reach outside or step outside their bubble of stability, they can have a tumble, which could potentially lead to things like concussions or traumatic brain injuries."

That's why, before individuals start playing pickleball, Glatt recommends they consult a physical therapist to have their balance and their joint health evaluated, and to ensure that they have the baseline fitness level to participate in pickleball at a basic level. "Furthermore, similar to a resistance-training program where you don't start lifting heavy weights right away, you don't start playing competitively right away either," he stresses. "At the beginning, people should be focused more on the process of skill acquisition than competitive play."

Organizations that work with active older adults should consider launching injury-prevention as well as fall-prevention programs in tandem with pickleball programming, Glatt suggests. The services of a fitness trainer or physical

therapist should be available, as well. "Organizations should also explore incorporating dual-tasking exercises and other open-skill activities such as table tennis into their programming," he says, "in order to make even more comprehensive cognitive-motor demands on their residents."

Soppe urges organizations to support their constituents in their efforts to play, particularly by providing practice with quick side-to-side movements. "Many times when our competitive juices take over, we move quickly, and even though we're not moving very far, those side-to-side motions increase the forces across the tendons and joints in ways that are different from what most people are used to," he states. "So getting residents into some type of physical training activity to get them in shape before they start playing is an important way to help prevent injury."

Multiple benefits, reasons to play

Despite its injury risks, pickleball offers other important benefits for players beyond physical and cognitive health that make it an attractive amenity for individuals and organizations alike.¹⁰ In a recent case study, in-person interviews with ambassadors for national governing body USA Pickleball suggest the sport's intergenerational possibilities appeal to older players¹¹ (see the reference to Samsung's new streaming channel in the sidebar on page 36). Participation provides an outlet as well to "reestablish

Input invited

Which topics intrigue you? What are your "hot topics" that you would like Marilyn Larkin to cover in this column? She invites you to send your suggestions to mlarkin@icaa.cc



an identity,”^{10,11} as players strive purposefully to improve their skills and to compete.^{10,11,12}

Opportunities to socialize are also part of the sport, as Soppe alluded to earlier. Besides doubles and mixed doubles formats, players connect with other pickleball enthusiasts while they wait for courts and participate in tournaments and leagues. Programming and clubs help build social circles around the sport.

A 2022 Pickleball Canada survey affirmed that “social aspects” are one of the main reasons that individuals across all ages (38%) say they play the sport. For 62% of all ages, “fun” was the prima-

ry reason, aligning with Soppe’s earlier comment; this figure rose to 89% among Boomers. Finally, 66% of Boomers gave “health and fitness” benefits as a reason they participate.¹³

“I know many people who are 65 plus and are actively, regularly playing pickleball with friends and colleagues and they absolutely love it,” Soppe says. “And we have evidence that engaging in activities that keep us fit and social are so important for living life with increased quality, not just quantity in terms of years.”

By addressing injury risks with programming and support, active-aging settings

can harness the popularity and passion for pickleball to encourage more constituents to enjoy this pathway to wellness.🌀

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Some pickleball developments

There’s no question that pickleball is *hot* and that many types of organizations are paying attention. Here are some examples:

• **Broadcasting**

The streaming platform Samsung TV Plus recently launched Pickleballtv, in partnership with the Professional Pickleball Association. A spokesperson for Samsung’s tennis channel, which hosts the pickleball channel, told the *Journal on Active Aging*® why: “Pickleball’s one of the few sports where 60-year-olds can play—and beat—16-year-olds. It’s an intergenerational game that allows grandparents to compete beside or against their children and grandchildren. Its appeal is undeniable.”

• **Consumer resource**

The website 55places.com, which helps consumers looking to move

into active-aging communities, compiled a list of the top communities for pickleball. Access this list at www.55places.com/blog/best-communities-for-pickleball-enthusiasts

• **Healthcare/injury prevention partnerships**

On the injury prevention front, Cedars-Sinai Kerlan-Jobe Institute in Los Angeles, where Clint Soppe, MD, is a sports medicine specialist, was recently named the 2024 Official Sports Medicine and Orthopedic Partner of the California Pickleball Association (CAPA) for this year’s tournaments. The Institute’s team will work closely with CAPA to develop injury-prevention programs, provide education on sports-related injuries, and make personalized care available to pickleball athletes.

• According to a recent article in *Medscape*,* Humana has set up several

partnerships with both recreational and professional pickleball organizations; physical therapy provider Select Medical is partnering with the Professional Pickleball Association; and the New Mexico and Arizona Pickleball Association is applying for a community grant from the Parkinson’s Foundation to provide funds for equipment and for an instructor who can teach the game to people with Parkinson’s disease.

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