Increasing Incidence of Pickleball Injuries Presenting to US Emergency Departments

A 10-year Epidemiologic Analysis of Mechanisms and Trends

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Background: Pickleball is one of the fastest-growing sports in the United States. It is popular among seniors but has recently grown across all age groups. As pickleball has gained interest, its corresponding injury burden has also increased.

Purpose/Hypothesis: The purpose of this study was to identify pickleball-related injury trends and underlying mechanisms across different age groups presenting to US emergency departments. It was hypothesized that (1) pickleball-related injuries would increase significantly between 2013 and 2022, (2) older age groups would have the greatest frequency of injury, and (3) falls would be the most common mechanism of injury.

Study Design: Descriptive epidemiology study.

Methods: The National Electronic Injury Surveillance System (NEISS) was queried for pickleball injuries between January 1, 2013, and December 31, 2022. The demographic information, injury site, and diagnosis were recorded, and case narratives were reviewed to identify the injury mechanism. The statistical sample weight assigned for NEISS cases by hospital was used to calculate national estimates (NEs). Injury trends over time were evaluated by linear regression.

Results: A total of 1110 NEISS cases representing 66,350 nationally estimated pickleball-related injuries were included. The mean age was 64 ± 14.7 years (range, 4-93 years). Most injuries occurred in those aged 65 to 80 years (NEISS cases = 643; NE = 40,507 [61.1%]), followed by those aged 35 to 64 years (NEISS cases = 349; NE = 20,785 [31.3%]). Falls were the most common injury mechanism overall (NEISS cases = 699; NE = 43,434 [65.5%]). However, being hit with a paddle and a twist/inversion were the most common mechanisms for ages 0 to 17 and 18 to 34 years, respectively. Fractures were the most common diagnosis (NEISS cases = 363; NE = 21,703 [32.7%]), followed by strains/sprains (NEISS cases = 327; NE = 20,419 [30.8%]). Also, 69.1% of all fractures occurred in female players. The wrist was the most injured, accounting for 12.7% of all injuries. Significant increases in pickleball injuries were seen over time ($P < .001$) and across all age groups ($P < .05$).

Conclusion: There was a significant increase in pickleball-related injuries presenting between 2013 and 2022, with most injuries arising from a fall. Notably, injuries decreased by 14% between 2019 and 2020 but rose again by 41% between 2020 and 2021 during the coronavirus 2019 pandemic. Older players disproportionately presented to the emergency department with pickleball-related injuries. Increased awareness and comprehensive injury prevention initiatives may be warranted to address the considerable prevalence of fractures and overuse/strain injuries.

Keywords: fractures; injuries; National Electronic Injury Surveillance System; pickleball; sports medicine

Pickleball is one of the fastest-growing sports in the United States, with participation increasing by 158.6% between 2020 and 2022.[38] The sport combines elements of tennis, badminton, and table tennis and is particularly appealing

to older adults because of its short learning curve and low-impact nature. The existing literature suggests that older adults engage in pickleball for individual and social benefits—including increased cognitive performance, enhanced athleticism, and improved well-being.[21,50] Likewise, pickleball is gaining popularity among the elderly because of its inclusive and intergenerational possibilities, which is of great interest to this population.[34]

As pickleball has gained more interest, there has been a corresponding increase in pickleball-related injuries.[48] Thus, the study of pickleball injury epidemiology and injury trends is crucial for guiding injury prevention. Changstrom et al[7] published data from the National Electronic Injury Surveillance System (NEISS) to characterize paddle sports-related injuries between 2007 and 2016. However, this paper did not specifically characterize pickleball injuries but instead grouped them with other paddle-related sports. Weiss et al[48] published pickleball injury epidemiology trends using NEISS data between 2010 and 2019, finding that slip/trip/fall/dive injury mechanisms predominated and that strains/sprains were the most common pickleball-related injuries. However, this study did not capture injury data between 2019 and 2022, which is when pickleball began its exponential growth.[39] Furthermore, this study did not characterize differences in body part injury site, injury mechanisms, or trends between age groups and rather focused on comparing senior pickleball players versus senior tennis players.

As members of the Scientific Collaborative for Orthopedic Research and Education Group, a multi-institutional orthopaedic research and mentorship group of faculty/attending physicians, residents, medical students, and other students, we aimed in this study to identify pickleball-related injury trends and underlying mechanisms among athletes presenting to US emergency departments (EDs) utilizing NEISS data. This study also aimed to elucidate age- and sex-specific injury characteristics to guide the prevention and treatment of pickleball injuries. It was hypothesized that injuries would increase over the study period across all age groups, that an older population (aged >65 years) would constitute a larger proportion of injuries, and that falls would be a major mechanism of injury.

METHODS

Database

The NEISS is a publicly available database maintained by the US Consumer Product Safety Commission. It includes deidentified data across over 100 EDs nationally. Each case in the dataset has a statistical sample weight assigned based on the hospital, which allows calculating national estimates (NEs) of injuries from the raw value of NEISS cases.

Data Extraction

The NEISS was retrospectively queried for all musculoskeletal and head pickleball injuries reported between January 1, 2013, and December 31, 2022, using the "Other Ball Sports" code nested under lacrosse, rugby, and miscellaneous ball games. An ED narrative is provided for each case in the NEISS dataset describing how the injury occurred. The narratives were searched for cases relevant to pickleball and filtered, accounting for misspellings. There were 1292 total cases of pickleball-related injuries extracted between 2013 and 2022 through the query. The patient's demographic information (age, sex, and race), injury location, diagnosis, and discharge disposition were available for each case.

The ED narratives were subsequently reviewed to identify the primary mechanism of injury. Each injury was then categorized into predetermined mechanism of injury categories. "Fall" refers to patients falling, tripping, or slipping during play independent of other contact. "Strain/Sprain" refers to an overuse injury where a player may have stretched or pulled a muscle. "Twist/Inversion" refers to injuries resulting from twists, rolls, or inversions independent of collisions or falls. "Lunging/Diving" refers to where the patient jumped and extended during play and injured themselves. Collisions were separated into different categories: "Hit with Ball," "Hit with Paddle," "Collision with Player," and "Other Collisions." "Other Collisions" refers to a player colliding with objects such as a wall, a bench, etc. "Other" includes any other injury that did not fall into one of the categories—including jamming a finger, jamming a toe, etc. The "Not Specified" category refers to injury narratives that did not specify an injury mechanism.

Exclusion Criteria

Injuries that did not occur directly while playing pickleball were excluded (eg, "a spectator watching pickleball who got hit"). Injuries that were not musculoskeletal or of the head were excluded (eg, chest pain, syncope, heat exhaustion/dehydration). Finally, injuries indirectly related to

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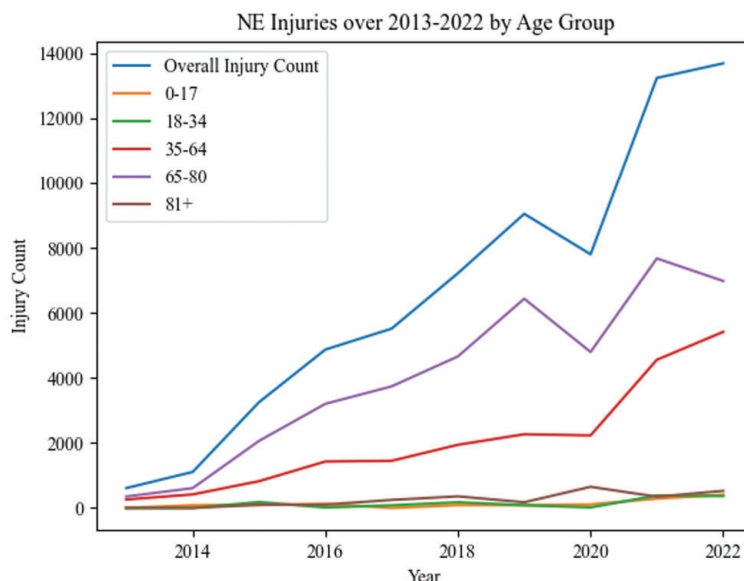†Icahn School of Medicine at Mount Sinai, New York, New York, USA.
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Figure 1. Nationally estimated pickleball-related injuries between 2013 and 2022. Age range stratification of injuries is inclusive. NE, national estimate.

pickleball (eg, "bitten on the ankles by fire ants while playing pickleball") were excluded.

Statistical Analysis

The analysis included descriptive statistics reported with the raw number of cases and with the statistical weights given by the Consumer Product Safety Commission for each case, allowing the calculation of NEs. Linear regression was utilized to assess trends in injuries during the study duration. The year of injury was the independent variable, and the frequency of injuries was the dependent variable. Injury trends were also stratified by age group. The P values, regression coefficients (β), and 95% CIs were reported when statistically significant ($P < .05$). The distribution of diagnoses between male and female sexes was assessed using Pearson chi-square analysis, and the P value was reported when statistically significant ($P < .05$). Python 3 with the pandas and SciPy data analysis libraries was utilized to analyze the data.[12,29,45]

RESULTS

There were 66,350 nationally estimated pickleball-related injuries (1110 NEISS cases) that were presented to US EDs between January 1, 2013, and December 31, 2022. 11,629 nationally-estimated pickleball-related injuries (183 NEISS cases) where the diagnosis was cardiac-related, heat exhaustion/dehydration, or not musculoskeletal or head-related were excluded. The mean age was 64 ± 14.7 years (range, 4-93 years), and injuries occurred more frequently in women (NEISS cases = 569; NE = 33,563 [50.6%]). Most injuries occurred in those aged 65 to 80

years (NEISS cases = 643; NE = 40,507 [61.1%]), followed by those aged 35 to 64 years (NEISS cases = 349; NE = 20,785 [31.3%]).

Linear regression analysis of annual injuries revealed a significant increase in injuries between 2013 and 2022 ($P < .001$; $R^2 = 0.95$; β = 1452.29; 95% CI, 1174.36-1730.22) (Figure 1). The significant increase in injuries was apparent across all age groups assessed: 0-17 ($P = .013$), 18-34 ($P = .026$), 35-64 ($P < .001$), 65-80 ($P < .001$), and 81+ years ($P = .002$). Moreover, the number of overall pickleball-related injuries presented to US EDs in 2022 was nationally estimated as 13,690 (NEISS cases = 240), 22-fold greater than in 2013 where cases were estimated as 611 (NEISS cases = 12). A decrease in injuries was seen among all age groups in 2020 during the coronavirus disease-2019 (COVID-19) pandemic, except for the 81+ age group. Overall, injuries decreased by 14% between 2019 and 2020, and rose again by 41% between 2020 and 2021.

Fractures were the most common diagnosis (NEISS cases = 363; NE = 21,703 [32.7%]), followed by strains/sprains (NEISS cases = 327; NE = 20,419 [30.8%]) (Table 1). Contusions/abrasions and closed head injuries accounted for 8.98% and 8.59% of all injuries, respectively. The wrist was the most common fracture site, accounting for 29.2% of all fractures, followed by the lower trunk (16.6%). Strains/sprains were most sustained to the lower leg (31%) or the ankle (14.7%).

The wrist was the most injured body part overall, accounting for 12.7% (NEISS cases = 141; NE = 8453) of all injuries, followed by the lower trunk (NEISS cases =126; NE = 8015 [12.1%]) (Table 1). The lower leg and head accounted for 11.7% and 11.3% of injuries, respectively, followed by the knee, accounting for 7% of all injuries.

TABLE 1
Pickleball Injury Incidence Stratified by Diagnosis and Body Part Affected[a]

	Category	NEISS Cases, n	NE, n	%
Diagnosis	Fracture	363	21,703	32.71
	Strain/sprain	327	20,419	30.77
	Contusions/abrasions	96	5959	8.98
	Closed head injury	97	5701	8.59
	Laceration	66	3755	5.66
Body part	Wrist	141	8453	12.74
	Lower trunk	126	8015	12.08
	Lower leg	123	7760	11.70
	Head	129	7515	11.33
	Knee	81	4655	7.02
	Ankle	73	4020	6.06
	Shoulder	66	3994	6.02
	Lower arm	59	3617	5.45
	Face	57	3087	4.65

[a]NE, national estimate; NEISS, National Electronic Injury Surveillance System.

TABLE 2
Distribution of Top 3 Injury Mechanisms, Diagnoses, and Body Parts Afflicted[a]

Age, y	NE (%)	Top 3 Mechanisms (%)	Top 3 Diagnoses (%)	Top 3 Body Parts (%)
0-17	1270 (1.9)	1. Hit with a paddle (37.8)	1. Strain/sprain (25.8)	1. Face (21.1)
		2. Fall (16.5)	2. Laceration (22.1)	2. Head (15.1)
		3. Other injuries (8.1)	3. Contusions/abrasions (18)	3. Wrist (9.8)
18-34	1292 (2)	1. Twist/inversion (25)	1. Strain/sprain (46.2)	1. Ankle (37.7)
		2. Fall (21.4)	2. Fracture (24)	2. Face (14.4)
		3. Strain/overuse (14.5)	3. Laceration (12.9)	3. Lower leg (13.5)
35-64	20,785 (31.3)	1. Fall (55.7)	1. Strain/sprain (38.1)	1. Lower leg (17.7)
		2. Strain/overuse (10.9)	2. Fracture (28.6)	2. Wrist (11.9)
		3. Twist inversion (8.8)	3. Other (10.6)	3. Lower trunk (9.9)
65-80	40,507 (61)	1. Fall (71.5)	1. Fracture (35.6)	1. Lower trunk (13.8)
		2. Strain/overuse (6.5)	2. Strain/sprain (28.2)	2. Head (13.5)
		3. Twist/inversion (4.8)	3. Closed head injury (10.5)	3. Wrist (13.1)
81+	2497 (3.8)	1. Fall (96)	1. Fracture (39.1)	1. Wrist (20.5)
		2. Strain/overuse (0.6)	2. Contusions/abrasions (24.1)	2. Head (15.9)
		3. Hit with a paddle (0.6)	3. Laceration (10.1)	3. Shoulder (10.5)

[a]NE, national estimate.

Falls were the most common mechanism of injury overall (NEISS cases = 699; NE = 43,434 [65.5%]). However, being hit with a paddle was the most common mechanism of injury among the 0-17 age group, and a twist/inversion was the most common mechanism for the 18-34 age group (Table 2). Among patients 65-80 and 81+ years old, falls accounted for 71.5% and 96% of injuries, respectively. The body part most injured also differed across age categories (Table 2). The face was most injured among the 0-17 age group, the ankle in the 18-34 age group, the lower leg in the 35-64 age group, the lower trunk in the 65-80 age group, and the wrist in the 81+ age group. Furthermore, while strain/sprain was the most common diagnosis for the 0-17, 18-34, and 35-64 age groups, fractures were the most common diagnosis among the 65-80 and 81+ age groups.

Most female patients reported to the ED with a fracture (NEISS cases = 250; NE = 15,010; 44.7%), followed by a strain/sprain (NEISS cases = 121; NE = 7140; 21.3%), whereas most male patients reported with a strain/sprain (NEISS case = 206; NE = 13,279; 40.5%), followed by a fracture (NEISS cases = 113; NE = 6693; 20.4%) (Table 3). Furthermore, female patients sustained most injuries of the wrist (NEISS cases = 113; NE = 6737 [20.1%]), while male patients sustained most lower leg injuries (NEISS cases = 86; NE = 5749 [17.5%]). Female patients sustained significantly more fractures than male patients, while male patients sustained significantly more strains/sprains than female patients ($P < .0001$) (Table 4).

In the study, 6.94% (NEISS cases = 77; NE = 4000) of patients were admitted. The lower trunk (eg, hip and

TABLE 3
Injury Incidence Stratified by Diagnosis and Body Part Affected

A. Injury Profile for Female Patients[a]

	Category	NEISS Cases, n	NE, n	%
Diagnosis	Fracture	250	15,010	44.7
	Strain/sprain	121	7140	21.3
	Closed head injury	53	3148	9.4
	Contusions/abrasions	49	3069	9.1
	Laceration	25	1494	4.5
Body part	Wrist	113	6737	20.1
	Head	63	3787	11.3
	Lower trunk	55	3346	10
	Lower arm	43	2642	7.9
	Knee	44	2492	7.4

[a]NE, national estimate; NEISS, National Electronic Injury Surveillance System.

B. Injury Profile for Male Patients[a]

	Category	NEISS Cases, n	NE, n	%
Diagnosis	Strain/sprain	206	13,279	40.5
	Fracture	113	6693	20.4
	Contusions/abrasions	47	2890	8.8
	Other	52	2692	8.2
	Closed head injury	44	2553	7.8
Body part	Lower leg	86	5749	17.5
	Lower trunk	71	4669	14.2
	Head	66	3728	11.4
	Ankle	42	2241	6.8
	Shoulder	32	2213	6.8

[a]NE, national estimate; NEISS, National Electronic Injury Surveillance System.

TABLE 4
Distribution of Diagnoses by Sex[a]

Diagnosis	Men, %	Women, %	P
Fracture	20.4	44.7	<.0001
Strain/sprain	40.5	21.3	<.0001
Contusions/abrasions	8.8	9.1	≥.999
Closed head injury	8.8	9.4	.8
Laceration	6.9	4.5	.08

[a]P values were calculated using Pearson chi-square analysis to assess differences in diagnoses for male versus female patients.

pelvis) was the most common injury site among admitted patients (42.2%). Fractures were the most common diagnosis among admitted patients (70.5%).

DISCUSSION

Pickleball injuries presented to US EDs between 2013 and 2022 have significantly increased across all age groups as the sport has become immensely popular in the United States. This study assessed the frequency and distribution of pickleball-related injuries and characterized underlying mechanisms. Injuries more frequently occurred in older athletes, with falls as the most common mechanism. Notable sex-specific differences were identified for injury diagnoses, where female patients had significantly greater levels of fractures while male patients had significantly greater levels of sprains. Around 7% of patients were admitted to the hospital, most frequently with hip/pelvis fractures. These results suggest that although pickleball is often considered an easygoing sport played among seniors, it can frequently cause fall injuries that increase morbidity. Emphasizing appropriate preventative protocols to patients can help reduce the likelihood of serious injury so that the physical and psychological benefits of pickleball can outshine its potential risks.

This study demonstrated a high burden of pickleball-related injuries in older adults, particularly those aged >65 years. The finding is supported by previous literature reporting that a significant proportion of injuries in pickleball occur in more senior players.[18] Falls were the most common mechanism of injury for older adults, which is likely secondary to an age-related decline in coordination and muscle tone.[1] However, falling can result in severe consequences that cause significant morbidity and mortality. Fractures and closed head injuries were 2 of the top

diagnoses among the 65-80 age group, which comprised 61% of all injuries. This is supported by available literature that suggests the prevalence of long bone and pelvic fractures, as well as intracranial injury, resulting in significant mortality.[31,38]

While pickleball has been typically regarded as a sport popular among seniors because of its psychosocial and physical benefits, the mean age of all players continues to decrease because of its rising popularity among younger populations.[36,39] Age-specific differences have been discussed in previous studies, although greater focus has been placed on evaluating older athletes.[48] In our study, we found that pediatric athletes less frequently sustain fracture injuries during pickleball play than older age groups, despite fractures constituting up to 25% of all childhood sports injuries.[11,13,27] Given the growth of pickleball among younger athletes, a potential rise in pediatric pickleball-related injuries in the future may warrant adequate prevention strategies.[37] There were also differences in the body parts injured across age groups. The pediatric population was most often injured in the face and head, which aligns with sports such as squash and tennis, where face injuries, particularly of the eyes and teeth, are often observed.[5] This study also showed that players in the 18-34 age range more frequently sustained an ankle sprain with an inversion mechanism. This finding aligns with tennis literature findings suggesting that ankle injuries and sprains frequently occur in younger adult athletes.[20,47] The lower trunk was among the top injured body parts for players in both the 35-64 and 65-80 age groups, aligning with a previous NEISS study by Lambers et al[26] that states younger patients are more likely to sustain ankle sprains while older patients are more likely to have lower trunk fractures. Finally, the wrist was a common injury site for all age groups except for the 18-34 years age group. Previous literature supports the prevalence of wrist injuries among pediatric patients, typically from high-energy mechanisms and the tendency of older adults to fall on an outstretched hand and injure their wrists.[23] To address eye injuries that primarily affect the pediatric population, using protective eyewear can help prevent ocular injury and has been recommended by both the American Academy of Pediatrics and the American Academy of Ophthalmology for sports with a risk of eye injury, such as pickleball.[3,28,40] To prevent ankle injuries mainly affecting the aged 18-34 cohort, previous literature suggests the incorporation of a warm-up routine and balance/coordination training to improve range of motion and functional strength.[4,22,25,33,44,46] For wrist injuries, particularly from high-energy mechanisms, a wrist guard could potentially help in injury prevention.[35] Importantly, the considerable pickleball injury burden among the elderly population, particularly from falls resulting in fractures, emphasizes the importance of appropriate preventive measures. Some of these measures include obtaining regular dual-energy x-ray absorptiometry (DEXA) scans, strength and balance training, vitamin D supplementation, and adequate warm-up before exercise to help combat age-related stiffness and muscle loss. Moreover, ensuring a safe playing environment with adequate lighting and well-maintained surfaces can further prevent falls.[42,43,49] In the case of injury, rest, icing, compression, and elevation, along with effective rehabilitation, is essential to ensure appropriate recovery of mobility and strength before returning to sport.[24]

Our study demonstrated a significant rapid rise in injuries between 2013 and 2022, likely secondary to the increasing popularity of pickleball. While previous studies[18,20] have utilized the NEISS database to report on injury trends in pickleball, these studies used data before the COVID-19 pandemic; however, pickleball has risen drastically in popularity since then.[19] Our study further demonstrated significant increases in injuries of all age groups when stratified across the study period. While injuries decreased 14% with the onset of the COVID-19 pandemic in 2020, an increase of 41% was seen between 2020 and 2021, with the sport reaching an all-time high in injuries. Interestingly, the 41% increase matches closely with reports of pickleball growing nearly 40% in popularity between 2019 and 2021, designating it as "America's fastest-growing sport."[14,19] Injuries rose again between 2021 and 2022 by 3%. However, in the age 81+ age group, the number of injuries increased by 274% between 2019 and 2020, which conflicts with reports that state physical activity significantly decreased during the pandemic for senior citizens.[15,32] However, a study by Choi et al[9] reported that the elderly (70+ years) spent more time outside engaging in physical activity and hobbies; thus, it may have been possible that pickleball was adopted as a socially distanced activity. In addition, it readily qualifies as a low-impact way for elderly people to stay active and enjoy a sport recreationally.

According to the 2022 Sports & Fitness Industry Association Single Sport Report on pickleball, about 60% of pickleball players are men, and 40% are women.[38] These percentages indicate a disproportionate number of women (50.6% in our study) reporting to US EDs with a pickleball-related injury. The disproportionate prevalence of women presenting to US EDs with pickleball injuries contrasts with previous studies that state women present less often to the ED for sports-related injuries, potentially because of generally reporting poor experiences in hospital EDs.[8,10,41] In accordance with earlier research,[48] we found that female patients most frequently sustained fractures, even making up 69.1% of all fractures in this study, while male patients most often sustained strains/sprains. Previous literature on the greater fracture rate among women supports this finding, especially among older/postmenopausal women who have a much greater rate of osteoporosis.[2,6] In strains/sprains, men most commonly injure their lower leg (excludes foot, ankle, and knee), which includes the calf muscles. Calf injuries have been shown to more frequently affect male patients.[30] The sex-specific differences in injury patterns identified in this study may guide informative prevention strategies, particularly for older female pickleball players at risk of sustaining a fracture injury.

Almost 7% of injuries that presented to the ED in the NEISS dataset resulted in hospital admissions, largely due to hip/pelvic fractures and closed head injuries. This finding aligns with the literature that reports hip fractures

as the most common injuries in the elderly population commonly after a fall. Risk factors such as reduced mobility and age-related diminishing of bone quality can contribute to the probability of fracture after a fall.[1] Our finding that 7% of all pickleball-related injuries during the study period resulted in admission aligns with the fact that these fractures typically require surgical intervention with hospitalization.[16] The considerable hospital admission burden, particularly for fractures among elderly pickleball players, suggests the importance of precautionary guidelines to prevent the likelihood of severe injury—including maintaining adequate calcium and vitamin D intake and staying physically active through exercise to ensure optimal bone health.[17] Adopting warm-up practices for strengthening and using proper footwear to improve stabilization should also be adopted to ensure player safety when engaging in pickleball.

Limitations

Although the results of this study can offer insight into the typical injury profile of pickleball players based on sex and age, there are limitations to consider. The NEISS dataset only reports pickleball-related injuries that present to the ED and does not capture all cases of pickleball-related injuries, which may potentially overlook less severe injuries treated in the outpatient setting. While the dataset serves as a representative sample of all US EDs, sampling error remains possible. Another important limitation is that the NEISS dataset does not have specific injury patterns, characteristics, or injury diagnoses (ie, fracture patterns, ligament injuries, severity of head injuries, etc). Moreover, no information on the frequency and duration of play was provided, which would allow for risk assessment relative to exposure. Because of the retrospective nature of this study, this information could not be included in the analysis. Furthermore, classifying the mechanism of injury relied on interpreting the available narrative reports, and thus some cases could not be categorized. About 13% of all injuries were coded as "unspecified," which may have affected the distribution of contributing mechanisms of injury. The study also excluded cases where the diagnosis was cardiac-related, heat exhaustion/dehydration, or not musculoskeletal or head-related. This underestimated the total pickleball-related case count by 11,629 cases (NE). Finally, the narratives often only specified 1 primary mechanism of injury instead of providing a full context (ie, they were running and fell forward), which prevented the authors from identifying secondary mechanisms.

CONCLUSION

The elderly population constitutes most pickleball-related injuries presenting to US EDs. Female players constitute a greater proportion of fractures, which was the most common diagnosis for injuries. The incidence of pickleball injuries has also significantly increased over the study's timespan between 2013 and 2022, with a remarkably rapid rise during the COVID-19 pandemic in the years 2020 and 2021, providing valuable data for evaluating pickleball injury trends. Although pickleball is often marketed as a low-impact sport for older individuals to stay active, many sustain an injury primarily due to falling and may sustain more severe injuries, such as hip fractures, which increase morbidity. Emphasis on appropriate preventative strategies for patients can help limit the likelihood of serious injury while playing pickleball.

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