Extracurricular Participation, Resilience, and Integration among Immigrant Youth in New Brunswick

A. Gallardo, D. Nguyen, A. Flewelling, K. Barker

Background and Objectives: Immigrant youth frequently experience psychosocial, cultural, and structural challenges related to migration and resettlement, highlighting the importance of identifying practical community-based factors that may support this population. Within this context, resilience and integration are important constructs related to immigrant health and well-being. Previous research has examined relationships between extracurricular participation and resilience or integration-related outcomes among immigrant and refugee populations; however, limited research has specifically examined the relationship between extracurricular participation, resilience, and integration among immigrant youth populations, particularly within rapidly growing newcomer communities in New Brunswick (NB), Canada. The purpose of this study was two-fold: (1) to examine the relationship between extracurricular participation, resilience, and integration among newcomer youth in New Brunswick, and (2) to identify barriers hindering youth access to extracurricular activities.

Methods: A cross-sectional survey study was conducted among newcomer high school students in NB, Canada. Participants completed questionnaires assessing demographic characteristics, extracurricular participation, resilience using the Connor-Davidson Resilience Scale (CD-RISC-25), and integration using a modified Multidimensional Measure of Immigrant Integration (MMII). Welch's independent samples t-tests were conducted to compare resilience and integration scores between extracurricular participants and non-participants. Spearman correlations were used to examine relationships between participation frequency and resilience/integration outcomes.

Results: A total of 208 newcomer students participated in the study. Students participating in extracurricular activities demonstrated higher resilience scores ($M=72.3$, $SD=15.2$) compared with those that did not participate ($M=65.9$, $SD=18.8$) ($p=0.019$). Students participating in extracurricular activities also demonstrated higher integration scores ($M=0.63$, $SD=0.11$) compared with those that did not participate ($M=0.54$, $SD=0.14$) ($p<0.001$). Frequency of extracurricular participation was positively correlated with both resilience ($r=0.21$, $p=0.002$) and integration ($r=0.35$, $p<0.001$). Most common barriers to participation included cost, transportation, and insufficient time.

Conclusions: Extracurricular participation was associated with higher resilience and integration among newcomer youth in NB. These findings suggest that accessible extracurricular programming may represent an important community-based strategy for supporting newcomer youth health and well-being. Addressing structural barriers to participation may improve equitable access to extracurricular opportunities among immigrant populations.

Keywords: immigrant youth; extracurricular activities; resilience; integration

The Impacts of Medical Scribes on Physician Efficiency and Satisfaction, and Patient Satisfaction: A Systematic Review with Meta-Analysis

A. Lambe, A. Levy

Background and Objectives: The objective of this study was to determine the effects of medical scribe implementation in the Canadian healthcare system, focusing on improved workflow and reduced physician burnout. The parameters investigated were patients per hour, documentation time, physician satisfaction, and patient satisfaction.

Methods: Four major databases were queried, PubMed, Science Direct, Directory of Open Access Journals, and Google Scholar, using the term "medical scribe" and results were filtered to include only studies performed between 2013-2023. Statistical analysis was performed in Python 3.11 using the Statsmodel package to measure effect sizes and pooled effect sizes.

Results: The meta-analysis indicated medical scribes were associated with an increase in patients per hour with a strong pooled effect of 0.60 to 1.61. Of nine studies included in patients per hour, eight showed significant increases. Seven of the eleven included studies indicated an increase in physician satisfaction in one or more areas surveyed. Eight of the eleven included studies indicated a significant reduction in documentation time. All 11 included studies reported overall patient satisfaction remained unchanged.

Discussion: The increase in the number of patients physicians can see per hour offers several potential benefits. First, physicians could expand their patient lists, directly reducing the number of people on the PCP waitlists. If applied on a larger scale, this could substantially decrease the number of patients actively seeking a PCP. Second, better efficiency allows physicians to see more patients daily, thus increasing the number of available appointment slots. This would not only increase appointment availability to current patients but also improve a patient's ability to secure a same day appointment. Alternatively, if physicians opted not to expand their patient list or increase appointment availability, they may be able to work at a more relaxed pace, spend more time with patients, or even work shorter days while treating an equal number of patients. This would likely act to improve overall well-being and play a protective role against burnout.

The reduction in documentation time likely plays a significant role in improving physician satisfaction. Reducing administrative burden can improve work-life balance by removing the necessity to perform documentation at home or reducing working hours. This can play a protective role on physician mental health.

The goal of measuring patient satisfaction in this review was to ensure that the benefits on efficiency and physician satisfaction did not come at the expense of patient experience, as this could have major implications for patient outcomes. Overall, patient satisfaction remained unchanged, and in some cases improved, indicating human scribes are viable from a patient's perspective.

Conclusions: Incorporation of medical scribes is associated with increased physician efficiency and reduced documentation time. Medical scribes may mitigate the need for increased numbers of physicians to cover current gaps in care seen in Canada, while also playing a protective role for physician mental health.

Keywords: medical scribe; physician efficiency; administrative burden; physician satisfaction; burnout

Echocardiographic hemodynamic outcomes and prosthesis–patient mismatch after transcatheter aortic valve implantation in patients with class III obesity: a province-wide retrospective cohort

A. Kamal, O. Elkhateeb

Background and Objectives: Class III obesity (BMI ≥40 kg/m^2) is increasingly common among patients undergoing transcatheter aortic valve implantation (TAVI), yet post-procedural hemodynamics and prosthesis–patient mismatch (PPM) are poorly characterized in this population. Because PPM is graded by indexing effective orifice area (EOA) to body-surface area (BSA), adiposity may inflate its apparent prevalence. We aimed to characterize within-patient hemodynamic change and its durability after TAVI, and to determine how PPM prevalence depends on its definition.

Methods: Retrospective cohort of 84 consecutive patients with BMI ≥40 undergoing TAVI at the QEII Health Sciences Centre between 2013 and 2025. All echocardiograms performed across the Nova Scotia provincial system (11 hospitals) were reviewed and 828 studies extracted. Analyses used standard resting transthoracic studies; valve-in-valve procedures (n=12) were excluded, leaving 72 patients. Within-patient change in mean and peak aortic gradient and dimensionless velocity index (DVI) was assessed from the closest pre-TAVI baseline to the earliest post-TAVI study, and durability from earliest to last post-TAVI study (Wilcoxon signed-rank). PPM was classified using measured EOA (continuity equation) and predicted EOA (published core-laboratory reference values for the implanted valve model and size), each indexed to pre-TAVI BSA, under conventional (≤0.85/≤0.65 cm^2/m^2) and obesity-adjusted (≤0.70/≤0.55 cm^2/m^2) thresholds.

Results: A pre-TAVI baseline was available in 71 of 72 patients (median follow-up 2.1 years). From baseline to earliest post-TAVI study, mean gradient fell from 41.8 to 11.7 mmHg (median change −29.2 mmHg [IQR −37.8, −21.7]; n=70), peak gradient fell by 50.8 mmHg [−63.6, −36.1] (n=68), and DVI rose from 0.25 to 0.52 (+0.25 [+0.22, +0.35]; n=51); all p<0.001. Among patients with two or more post-TAVI studies, mean gradient was unchanged between early and last studies (+1.3 mmHg, p=0.31), with minor changes in peak gradient (+4.0 mmHg, p=0.02) and DVI (−0.05, p<0.001). At last follow-up, paravalvular regurgitation (graded in 39 patients) was absent in 13, trace in 13 and mild in 13; total aortic regurgitation (n=71) was absent in 41, trace in 23 and mild in 7, none was moderate or greater. Six of 72 patients (8%) met the VARC-3 gradient criterion for moderate hemodynamic valve deterioration. By measured EOA (n=49), moderate-or-severe PPM was present in 51% (severe 29%) by conventional and 35% (severe 14%) by obesity-adjusted thresholds. By predicted EOA (n=67), corresponding rates were 70% (severe 7%) and 13% (severe 0%). Self-expanding valves had larger predicted indexed EOA than balloon-expandable valves (median 0.87 vs 0.76 cm^2/m^2, p<0.001).

Discussion: Post-TAVI gradients fell within published normal ranges, yet PPM prevalence depended on its definition: by conventional measured criteria, severe PPM was over twice the STS/ACC TVT Registry rate (12%), but this excess largely resolved with obesity-adjusted thresholds and predicted EOA. Apparent PPM despite low gradients suggests over-indexation, as adipose tissue inflates BSA without proportionate flow demand.

Conclusions: TAVI provides effective, durable hemodynamic relief in class III obesity. PPM prevalence varies several-fold with its definition, and conventional criteria classify many patients with normal gradients as mismatched. Correlating each PPM definition with clinical outcomes is the next step to establish which is prognostically meaningful.

Keywords: transcatheter aortic valve implantation; class III obesity; prosthesis–patient mismatch

Long-term Outcomes of Non-Operative Management for Achilles Tendon Ruptures: A >10-Year Follow-Up

A. Marshall, E. Liu, B. Burgeson, J. Morash, M. Glazebrook

Background and Objectives: Achilles tendon rupture (ATR) incidence is rising, and non-operative management is increasingly favored given comparable short- and mid-term outcomes to surgical repair with fewer risks. However, data beyond 10 years remain limited. This study evaluated long-term function, satisfaction, symptoms, and re-rupture rates in patients treated non-operatively for acute ATR injuries more than 10 years prior and compared long-term function to previously documented 1-year outcomes.

Methods: This retrospective cohort study identified 69 patients treated non-operatively for an acute ATR at the Halifax Infirmary (QEII Health Sciences Centre) between 2011 and 2015, all with documented 1-year follow-up. Long-term outcomes were collected via structured telephone interview at a minimum of 10 years post-injury. Assessments included evaluation of the Achilles Tendon Total Rupture Score (ATRS), patient satisfaction, reported pain, rates of re-rupture, and return to pre-injury activity.