

Summary Report for Documents Reviewed at the APIC Greater NY Chapter 13 Journal Club			Date: 4/19/2023 Reviewer: Alex Grizas Appraisal Score: B		
Article Being Evaluated: Impact of COVID-19 RT-PCR testing of asymptomatic health care workers on absenteeism and hospital transmission during the pandemic (<i>E. Teixeira Mendes et al.</i>)					
LEVEL OF EVIDENCE					
REPORT OF A SINGLE RESEARCH STUDY? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (if no go to summary)					
SETTING: 325-bed regional referral hospital in Campinas, Brazil with ICU, COVID-19 unit, med/surg, etc. May-Aug 2020					
SAMPLE SIZE: 473 HCW on multiple units (170 beds)					
COMPOSITION: ICUs, COVID-19 wards, clinical and surgical wards, adult ED, administration, and cleaning and support groups were invited to participate (=170 beds, 473 HCW) in symptom screening and x3 COVID PCR testing if asymptomatic from May – Aug 2020. HAI COVID, clustering of (+) HCW, absenteeism for “all cause” during the intervention and year prior (2019), absenteeism for COVID-19 during the intervention period, and local COVID rates were measured.					
INTERVENTION(S) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		CONTROL <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		RANDOM ASSIGNMENT <input type="checkbox"/> Yes <input type="checkbox"/> No	
YES to intervention, control and random assignment		<input type="checkbox"/> LEVEL I Randomized Controlled Trial (RCT) or Experimental Study			
YES to Intervention and either Control or Random Assignment		<input checked="" type="checkbox"/> LEVEL II Quasi-experimental (no manipulation of independent variable; may have Random Assignment or Control)			
YES to intervention only OR		<input type="checkbox"/> LEVEL III Non-experimental (no manipulation of independent variable; includes descriptive, comparative, and correlational studies; uses secondary data			
NO to intervention, Control and Random Assignment		<input type="checkbox"/> LEVEL III Qualitative (exploratory (e.g., interviews, focus groups)) starting point for studies where little research exists; small samples sizes; results used to design empirical studies.			
QUALITY OF EVIDENCE: STUDY					
Does the researcher identify what is known and what is not known about the problem and how the study will address any gaps in knowledge?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		A HIGH	Consistent, generalized result Sufficient sample size Adequate control Definitive conclusions Consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence
Was the purpose of the study clearly presented?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Was the literature review current (most sources within last 5 years)?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Was sample size sufficient based on study design and rationale?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
If there was a control group: - Were the characteristics and/or demographics similar in both control and intervention groups? (they didn't speak to any changes in staffing in 2019 vs. 2020, or anything that happened at the very start of the pandemic (i.e., March/April 2020) at their facility) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA - If multiple settings were used, were the settings similar? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA - Were all groups treated equally except for the intervention group(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA				B GOOD	Reasonably consistent result Sufficient sample size for the study design Some control Fairly definite conclusions Reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence
Are data collection methods described clearly? (would like to have known more about 473 HCW → 2 non participants → 429 asymptomatic HCW tested – talk more about the symptomatic HCW and connect back to the asymptomatic ones and testing)		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			

Was instrument validity discussed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	C	Low Quality Or Major Flaws	Little evidence with inconsistent results Insufficient sample size for the study design Conclusions cannot be drawn
Was the instrument reliable (e.g., Cronbach's $\alpha \geq 0.70$)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
If survey/questionnaire was used, was response rate $\geq 25\%$	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA			
If tables were presented, was the narrative consistent with the table content?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
Were the results presented clearly?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
Were conclusions based on results?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
Were study limitations identified and addressed? (but they could have expounded on future outbreaks/pandemics and utility, would have liked to see more data about the symptomatic HCW)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA			
			Additional Comments:	

**This appraisal tool has been modified from AORN Research Evidence Appraisal tool – Ref: Sadahiro S., Suzuki T., Tanaka A., et al. AORN Journal, July 2014 Vol 100 No 1