How Do Intrinsic and Extrinsic Factors Influence Medical Professionals in Work-Family Conflicts? A Pilot Single Health System Investigation

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Background

- Work-family conflict occurs when competing professional and personal responsibilities create incompatible role demands, leading to stress and burnout.
- Physicians experience significantly higher rates of burnout (43.2% in 2024) compared to the general population, with elevated suicide risk[1], but less focus has been placed on how clinicians make decisions when conflicts arise.
- Moral decision-making during work–family conflict may be shaped by intrinsic factors (e.g., values, personality traits, moral identity) and extrinsic factors (e.g., institutional culture, workload, staffing, and family demands).
- This pilot study explores how demographic, situational, environmental, and interindividual factors influence moral decision-making during work-family conflicts.

Objective

To identify contextual, demographic, and environmental factors influencing moral tendencies, confidence, and guilt among medical students and practitioners in work–family conflict scenarios, with the goal of informing targeted strategies to reduce moral strain and burnout risk.

Methods

- Design: Cross-sectional survey-based pilot study
- Participants: 53 total respondents (37 included in analysis: 28 medical students, 9 physicians)
- Instrument: Experimental vignette/anonymous moral tendency survey based on Graham et al.[2]
- Variables:
  - Demographics: age, gender, marital status, children, specialty, professional role etc.
  - Situational: rural vs. urban setting, event frequency, surgery risk
- Measures: Likert-type scales for confidence (1–10) and guilt (1–5)
- Analysis: Fisher's Exact Test and t-tests ($p < 0.05$)

Results

Urban vs. Rural Job Obligation (Frequent Family Visitation Baseline - Low Pressure Family Obligation)

	Which obligation do you satisfy? - Rural / LPFO		
	Professional Obligation (N=29)	Family Obligation (N=8)	P-value
Which obligation do you satisfy? - Urban / LPFO, n (%)[2]			0.0148[1]
Professional Obligation (n=14)	14 (100.0%)	0 (0.0%)	
Family Obligation (n=23)	15 (65.2%)	8 (34.8%)	

Urban vs. Rural Job Obligation (Infrequent Family Visitation Baseline - High Pressure Family Obligation)

	Which obligation do you satisfy?- Rural / HPFO		
	Professional Obligation (N=15)	Family Obligation (N=22)	P-value
Which obligation do you satisfy? - Urban / HPFO, n (%)[2]			0.0069[1]
Professional Obligation (n=5)	5 (100.0%)	0 (0.0%)	
Family Obligation (n=32)	10 (31.3%)	22 (68.8%)	

Yearly Family Event vs. Once-in-a-lifetime Event (High Stake Surgery Baseline - High Pressure Professional Obligation)

	Which obligation do you satisfy? - HPPO/ Once-in-a-lifetime Event		
	Professional Obligation (N=10)	Family Obligation (N=27)	P-value
Which obligation do you satisfy? - HPPO / Yearly Event, n (%)[2]			0.0056[1]
Professional Obligation (n=23)	10 (43.5%)	13 (56.5%)	
Family Obligation (n=14)	0 (0.0%)	14 (100.0%)	

Frequent vs Infrequent Family Visitation (Urban Job Obligation Baseline - Low Pressure Professional Obligation)

	Which obligation do you satisfy? - LPPO / Infrequent Family Visitation		
	Professional Obligation (N=5)	Family Obligation (N=32)	P-value
Which obligation do you satisfy? - LPPO/ Frequent Family Visitation, n (%)[2]			0.0574[1]
Professional Obligation (n=14)	4 (28.6%)	10 (71.4%)	
Family Obligation (n=23)	1 (4.3%)	22 (95.7%)	

Results Continued

Yearly Event vs. Once-in-a-lifetime Event Confidence and Guilt

		Yearly (A)	Once-in-a-lifetime (B)	B-A	P-value
Yearly Event vs. Once-in-a-lifetime Event (LPPO Baseline)	Confidence[1] (Mean ± SD)	6.46 ± 2.01	7.70 ± 2.00	1.24 ± 1.59	<.001
	Guilt[2] (Mean ± SD)	2.89 ± 0.88	3.57 ± 0.93	0.68 ± 0.85	<.001
Yearly Event vs. Once-in-a-lifetime Event (HPPO Baseline)	Confidence[1] (Mean ± SD)	6.62 ± 2.15	6.89 ± 2.28	0.27 ± 2.18	0.456
	Guilt[2] (Mean ± SD)	2.78 ± 1.03	2.95 ± 1.08	0.16 ± 0.90	0.279

Scenario Contrast	Pressure Type	Confidence	Guilt
Rural vs Urban (HPFO)	↑ Professional	↓	↓
Once-in-a-lifetime vs Yearly (LPPO)	↑ Family	↑	↑
Low stakes vs High stakes surgery (HPFO)	↑ Professional	↓	↓

Discussion

- This pilot study demonstrates that moral decision-making in work–family conflict can be systematically measured and is influenced by contextual and career-stage factors, identifying potential upstream contributors to burnout.
- Opposing emotional patterns: professional pressure elicits duty-driven detachment, while family pressure enhances guilt-driven confidence.
- Suggests that rural environments and high-stakes professional expectations may exacerbate work-family stress and burnout risk
- Medical students more often chose family obligations than physicians
- Rural and understaffed settings may intensify moral strain, highlighting the need for institutional strategies to better support clinicians navigating work–family conflicts.

References

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