Challenges in managing suicide risk in combat zones

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“I got my second Article 15. I’ll probably lose a stripe over it, and they’re going to send me back home now. I told my girlfriend about it and she got mad at me and hung up the phone. She won’t answer my phone calls or emails now. I just don’t know what I’m going to do. I was in my room yesterday and I was just thinking to myself “What’s the point? I just fuck everything up.” So I took out my gun from my holster and loaded it, and held it to my head. I started to pull the trigger, but then my friend came to my door and knocked. She saw me with the gun and asked what I was doing and I told her. She took my gun away and went and told the Shirt, and they took me to mental health. If my friend hadn’t come right then I’m pretty certain I’d be dead. It just happened so fast. ”

“We were out on patrol all day. It was hotter than hell like usual. I was up in the turret, we had been out for like 12 hours or something, and nothing was happening, and that’s when I first thought about it. I just saw myself holding my gun to my head and pulling the trigger. And I just couldn’t stop thinking about it after that. We got back to the FOB and we dismounted, and I just jumped down to the ground and put the M-16 under my chin and pulled the trigger. I don’t know why I did it. It just seemed like the thing to do. My buddies came running and tackled me and took the gun away. I promise I won’t do it again, though. Just don’t send me back home. It was stupid of me. I swear I won’t do it again.”

“I’ve tried it every way I know. I kick boxes and objects hoping they’re IEDs and blow up, but none of them do. I’ve run out into gun battles hoping to get shot, but they always fucking miss. There was this one time we were hiding behind a berm and the bullets hit the dirt right in front of me, and I thought “Man that was close,” then it suddenly dawned on me that this was my chance. So I ran up and started shooting to get their attention, out in the open, but they still didn’t hit me. They gave me medals for that. They keep giving me fucking medals when all I want to do is die. Now the action is quieting down here, and I realized that I was losing my chance. So I took a handful of Benadryl, hoping I would stop breathing when I slept. It’s like I can’t fucking die no matter what I do.”

The importance of context

- Principles of risk management remain constant across settings
  - Crisis management
  - Problem solving orientation
  - Skills training
- Specific strategies and methods for risk management differ according to setting
  - Means restriction
  - Treatment options
  - Integration of support networks

COMBAT EXPOSURE & HABITUATION TO DEATH

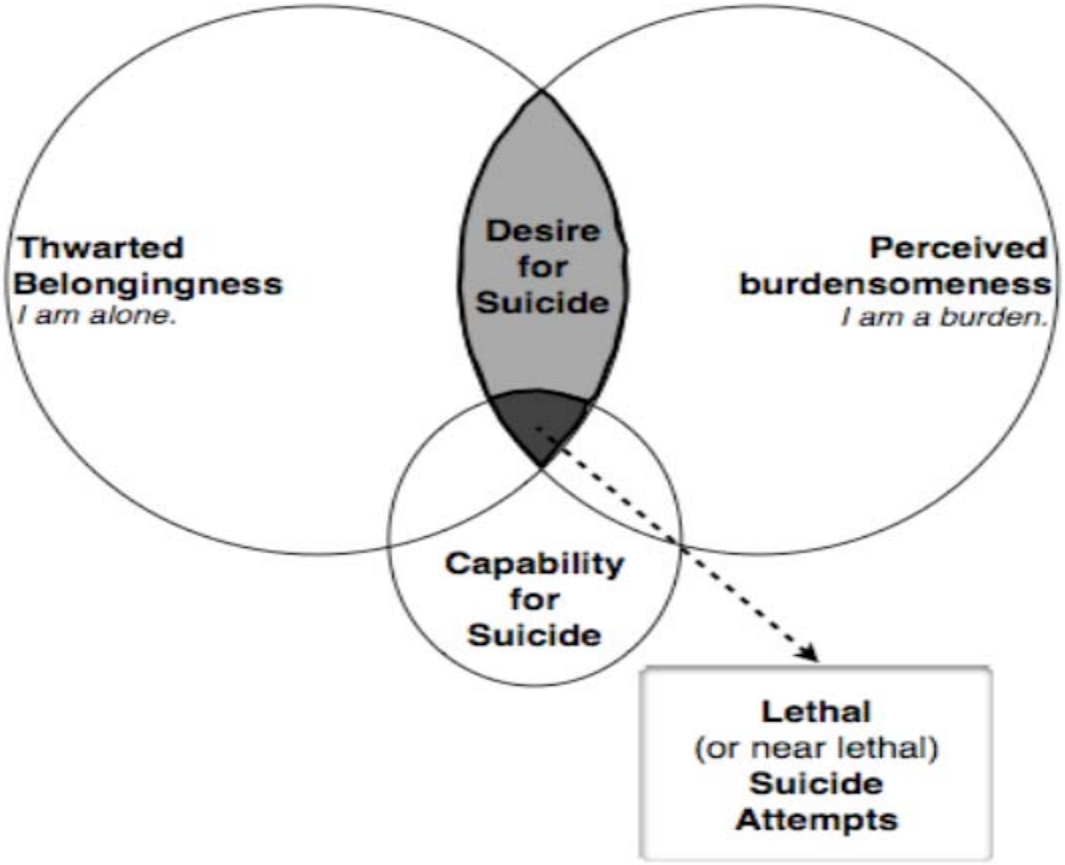
Combat exposure & suicide

- Combat exposure appears to be linked to suicide risk
  - Suicide ideation associated with greater war zone violence and atrocities (Beckham et al., 1998; IOM, 2007; Sareen et al., 2007; Yehuda et al., 1992)
  - Longer length of combat tours associated with deaths by suicide among Vietnam vets (Adams et al., 1997)
  - Increased suicide rate among current military personnel now surpasses civilian rate (Kang & Bullman, 2008)

Combat exposure & suicide

- What accounts for the link between combat exposure and suicide risk?
  - Interpersonal-psychological theory of suicide (IPTS) suggests that combat exposure contributes to *acquired capability for suicide* (Joiner, 2005; Selby et al., in press)
    - Fearlessness regarding death
    - Habituation to pain

Interpersonal-psychological theory of suicide



(from Van Orden et al., in press)

Combat & acquired capability

- Military personnel have higher capability for suicide
  - 88 Airmen with no prior deployments have significantly higher capability scores than civilian sample, including multiple attempters (Bryan et al., 2009)
  - Combat exposure predicts capability among 522 deployed personnel (Bryan, Morrow, et al., 2010)
  - Initiating violence or aggression most accounts for capability (Bryan & Cukrowicz, 2010)

In sha'Allah

- "If God wills"
- Indicates lack of perceived control over life, and an indifference regarding life
- Contributes to risky decision-making that mirrors "suicide by cop" behaviors
  - Could place entire units at risk

ACCESS TO MEANS

Availability & lethality of means

- Firearms used with greater frequency for suicide among deployed personnel (93% vs. 52%) (Gahm & Reger, 2009)
- Decision to kill oneself is sudden, with little time for intervention (Simon et al., 2001)
  - 24% make decision within 5 mins of attempt
  - 70% make decision within 1 hr of attempt
- Lethality related more to availability of means than suicidal intent (Brown et al., 2004; Eddleston et al., 2006; Peterson et al., 1985)

Restriction of means

- Restriction of means impractical in combat zones
  - Personnel required to carry weapons to gain access to facilities
  - Easy access to others' weapons
  - Easy access to explosives and other lethal methods

SLEEP DISRUPTION AND INSOMNIA

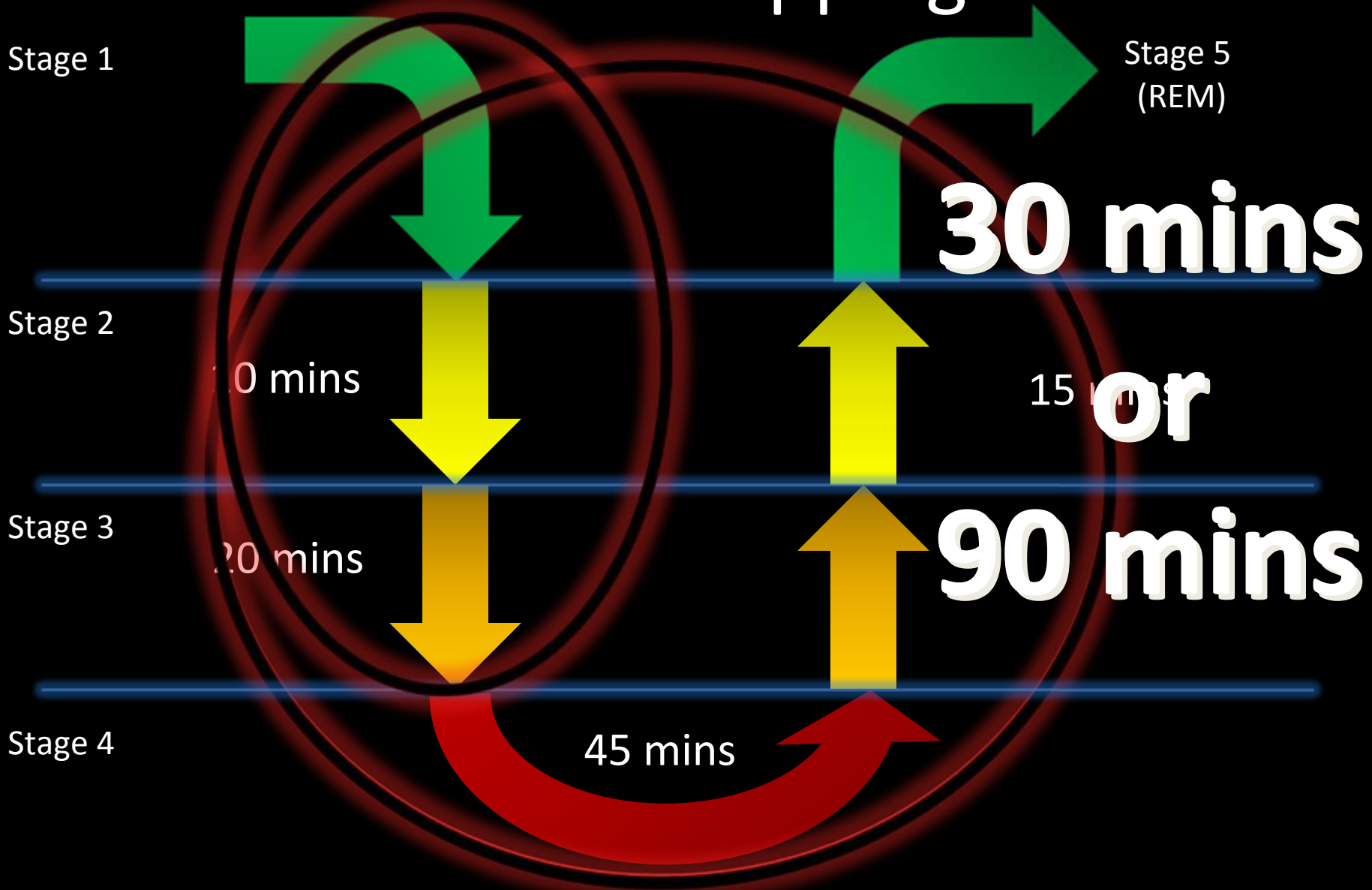
Sleep disruption

- Significant relationship between insomnia and suicidality above and beyond depression and other risk factors (Argargun et al., 1997; Bernert et al., 2005; Fawcett et al., 1990)
- Nightmares significantly predict suicide ideation even in presence of insomnia and depression (Argargun et al., 1997; Bernert et al., 2005)

Sleep disruption

- Sleep deprivation, sleep disruption, and nightmares common among deployed service members
- Stable, regular sleep patterns can be difficult to achieve due to mission demands
- Limitations in using sleep medications

Tactical napping



AGITATION, DESPERATION, & HYPERAROUSAL

Agitation & Desperation

- Wide clinical consensus that agitation is important indicator of acute suicide risk
  - Predicts suicidality among depressive episodes (Balazs et al., 2006; Benazzi, 2005)
  - Agitation is independent of psychiatric diagnosis
- SSRIs can contribute to agitation in first weeks of treatment, although they reduce symptoms in long-term
- Desperation predicts current suicide ideation and lifetime suicide attempts among psychiatric ER patients (Marzuk et al., in press)

Desperation

Correlations

	1	2	3	4	5	6
1. Desperation	1					
2. PCL	.688**	1				
3. ISI	.471**	.621**	1			
4. PHQ	.741**	.650**	.742**	1		
5. SI	.453**	.182**	.243**	.518**	1	
6. SBQ	.459**	.266**	.269**	.542**	.697**	1

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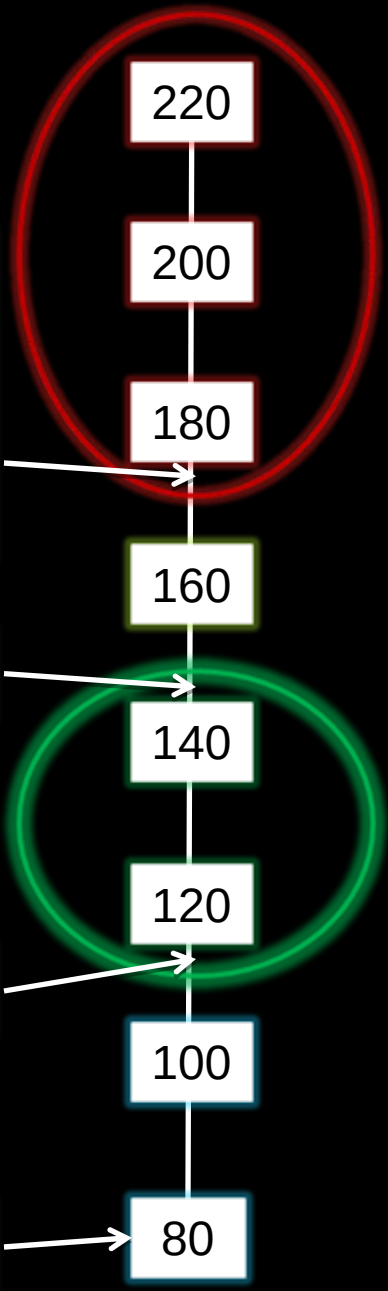
Hyperarousal

- Feeling jumpy or on edge is common among deployed service members
- Hyperarousal “symptoms” positively correlated with length of time in theater
- Hyperarousal can be adaptive in combat zones
- Agitation can contribute to and maintain sleep disruption



175 bpm
Cognitive processes deteriorate
Reduced bleeding from wounds
Loss of peripheral vision
Loss of depth perception
Loss of near vision
Auditory exclusion

145 bpm
Complex motor skills deteriorate

115 bpm
Fine motor skills deteriorate

60-80 bpm
Normal resting heart rate

Above 175 bpm

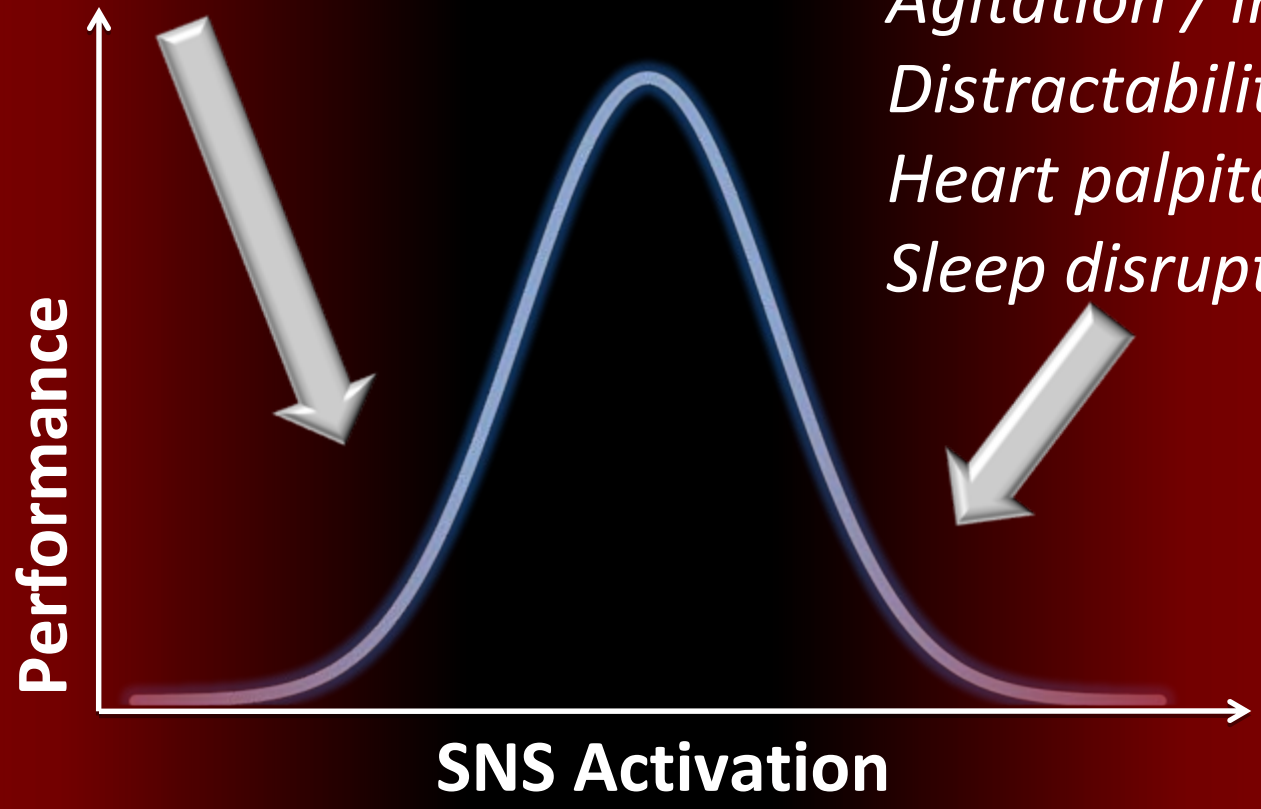
Irrational fight-flight-freeze
Submissive behavior
Bladder & bowel voiding
Maximal performance for gross motor skills (e.g., running, charging)

115-145 bpm
optimal combat performance level

Complex motor skills
Visual reaction time
Cognitive reaction time

Fatigue / exhaustion
Poor performance

Agitation / irritability
Distractability
Heart palpitations
Sleep disruption



SOCIAL SUPPORT

Social support

- Decreased belongingness strongly associated with suicide ideation, suicide attempts, and death by suicide (Conner et al., 2007; Joiner et al., 2006; Van Orden et al., 2008)
- Separation from primary sources of social support when deployed
  - Unreliability of communication
  - Difficulty communicating with friends/family about experiences
    - Feeling “out of place” or misunderstood
    - Emotional numbing

Thwarted belongingness

Correlations

	BELONG	AVOID	SI	SBQ
BELONG	1			
AVOID	.494**	1		
SI	.259**	.242**	1	
SBQ	.357**	.337**	.697**	1

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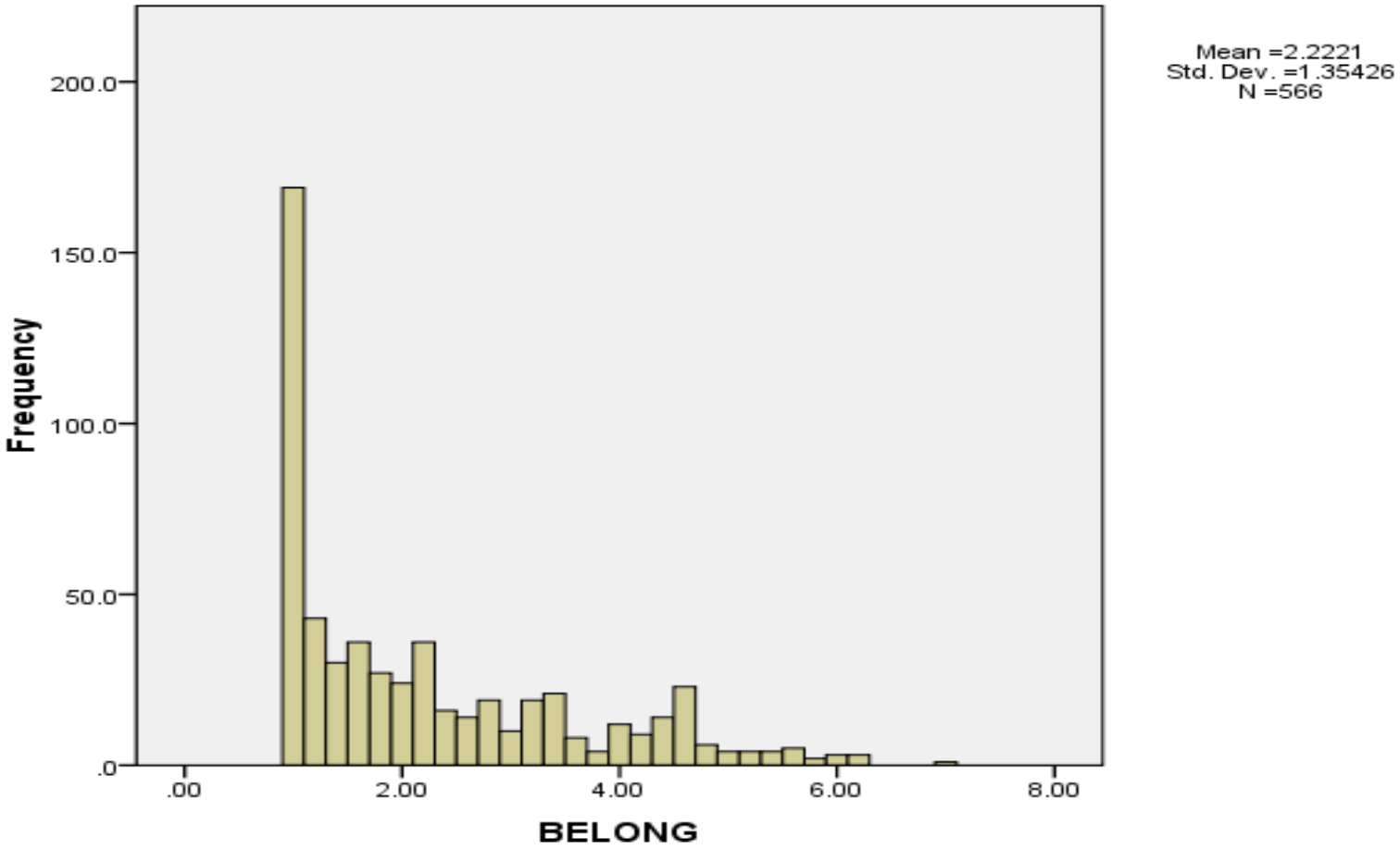
Thwarted belongingness



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Belongingness

- Positive impact of deployment on belongingness
  - Combat traditionally associated with “brothers in arms” mentality
  - Emphasis on social cohesiveness and teamwork (Wingmen, battle buddies)
- Unit watch can capitalize upon shared responsibility
  - Often misconstrued as punitive action
  - Can contribute to MH stigma
  - Easy availability of lethal means can limit usefulness

LIMITED ACCESS TO MENTAL HEALTH RESOURCES

Distribution of MH resources

- Specialized services (substance abuse, inpatient care, family therapy) not available
- Non-uniform distribution of MH resources
  - Some areas have little / no access to MH providers
- Medication issues
  - Formularies limited
  - Pharmacies not always available
  - General practitioners primary source of psych meds
  - Med limitations due to side effects

Access to MH services

- Transportation issues
  - 25% of deployed personnel report inability to conveniently access MH services (MHAT-IV, 2006)
  - Transporting patients must balance need potential benefit with potential risk required for movement
  - High cost and resource demands to move patients
  - Unpredictability of combat operations and demands limits ability to keep appointments

Service provisions

- Limitations in providing services
  - Limited access to communication methods for contacting providers
  - Mission demands unpredictable, can hamper attendance and communication with providers
  - “Once-a-week” model can be impractical
  - Group therapy / class modalities limited by poor attendance
  - Difficulty getting time off from work is a common barrier reported by deployed personnel (MHAT-IV, 2006)

Use of combat support hospitals

- Admission to CSH common risk management strategy for high risk patients
- Although appropriate for the context, CSH should not be mistaken for inpatient psych unit
  - Inadequate resources and manning
  - Speedy A/E required

MOTIVATIONAL ISSUES

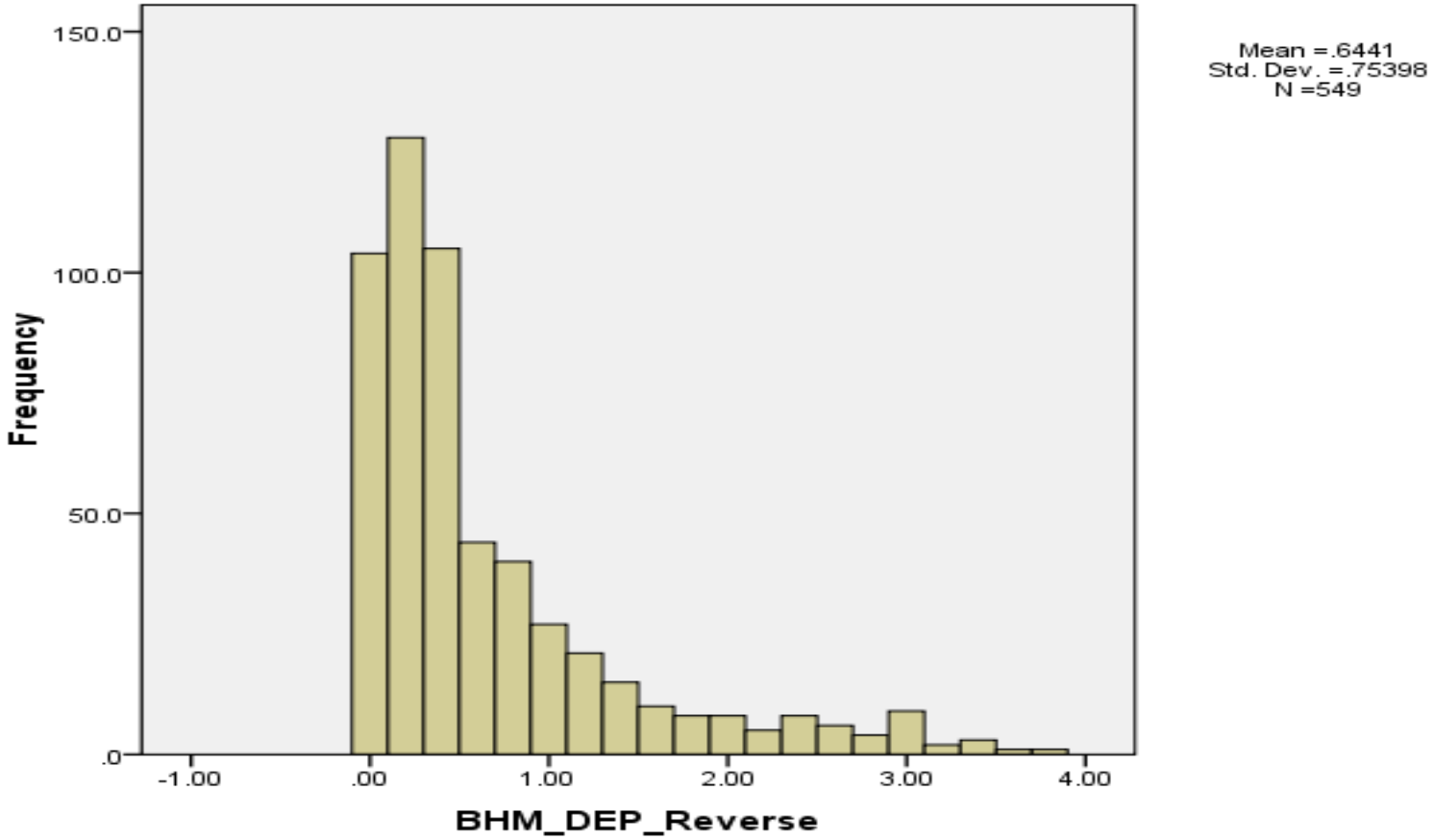
Limitations in self-report

- Inaccuracies in self-disclosure
  - Faking bad
    - Member attempting to avoid demand or task
    - Common request by military leadership
    - Potential for behavioral acting out
    - Potential for rendering clinical opinion at odds with desires of military leadership
  - Faking good
    - Member attempting to avoid perceived repercussions
    - Prodromal suicidal state without explicit suicidality

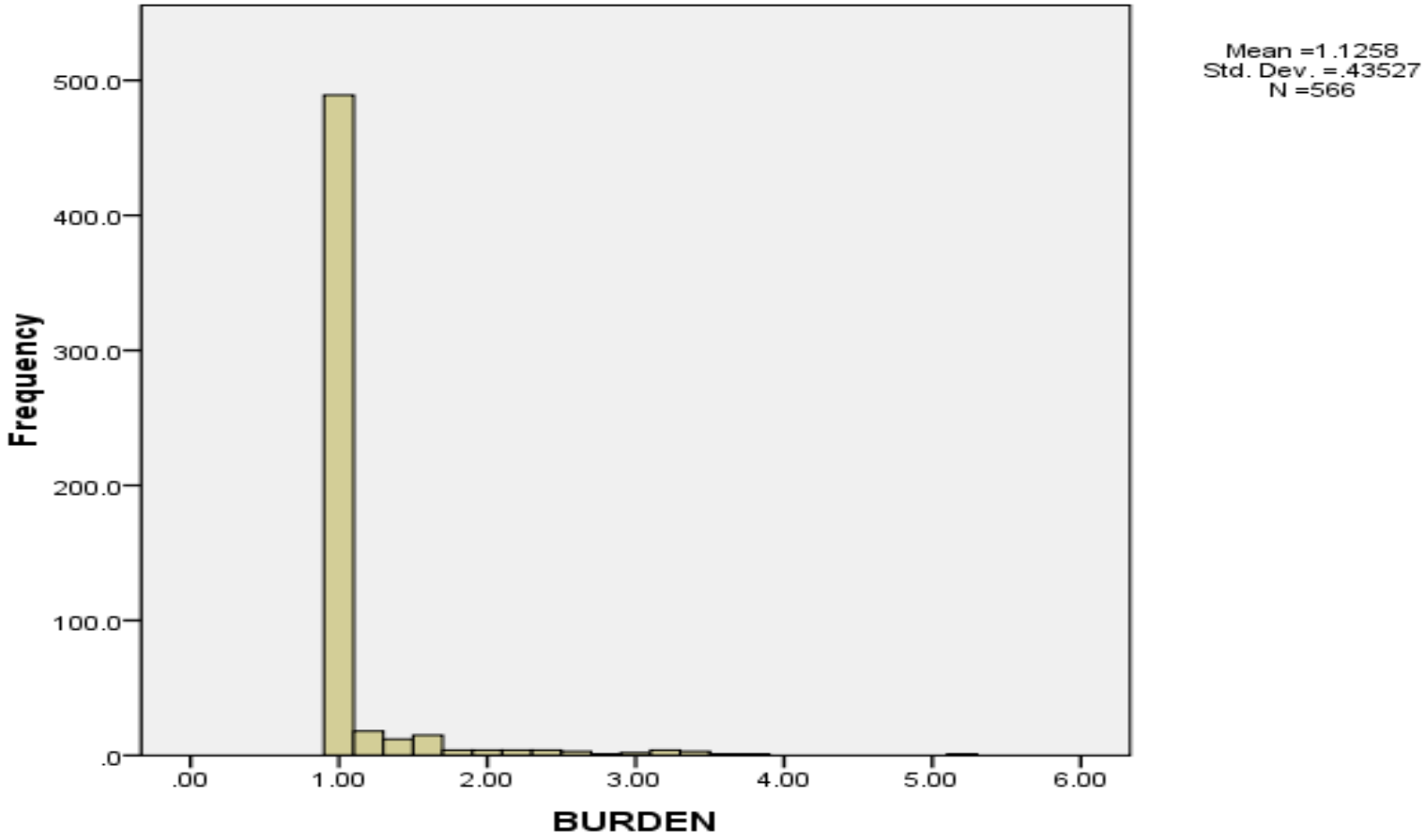
Challenges and limitations

- Cannot A/E every service member presenting with suicidality
- Suicide risk is not dichotomous (i.e., present vs. absent), but exists on continuum and fluctuates
- Suicidal behavior cannot be predicted because of low base rate
- Risk assessment approach should be adopted clinically and with military leadership (Bryan & Rudd, 2006)
- Use of indirect indicators of risk with high criterion validity

Depression distribution



Burdensomeness distribution



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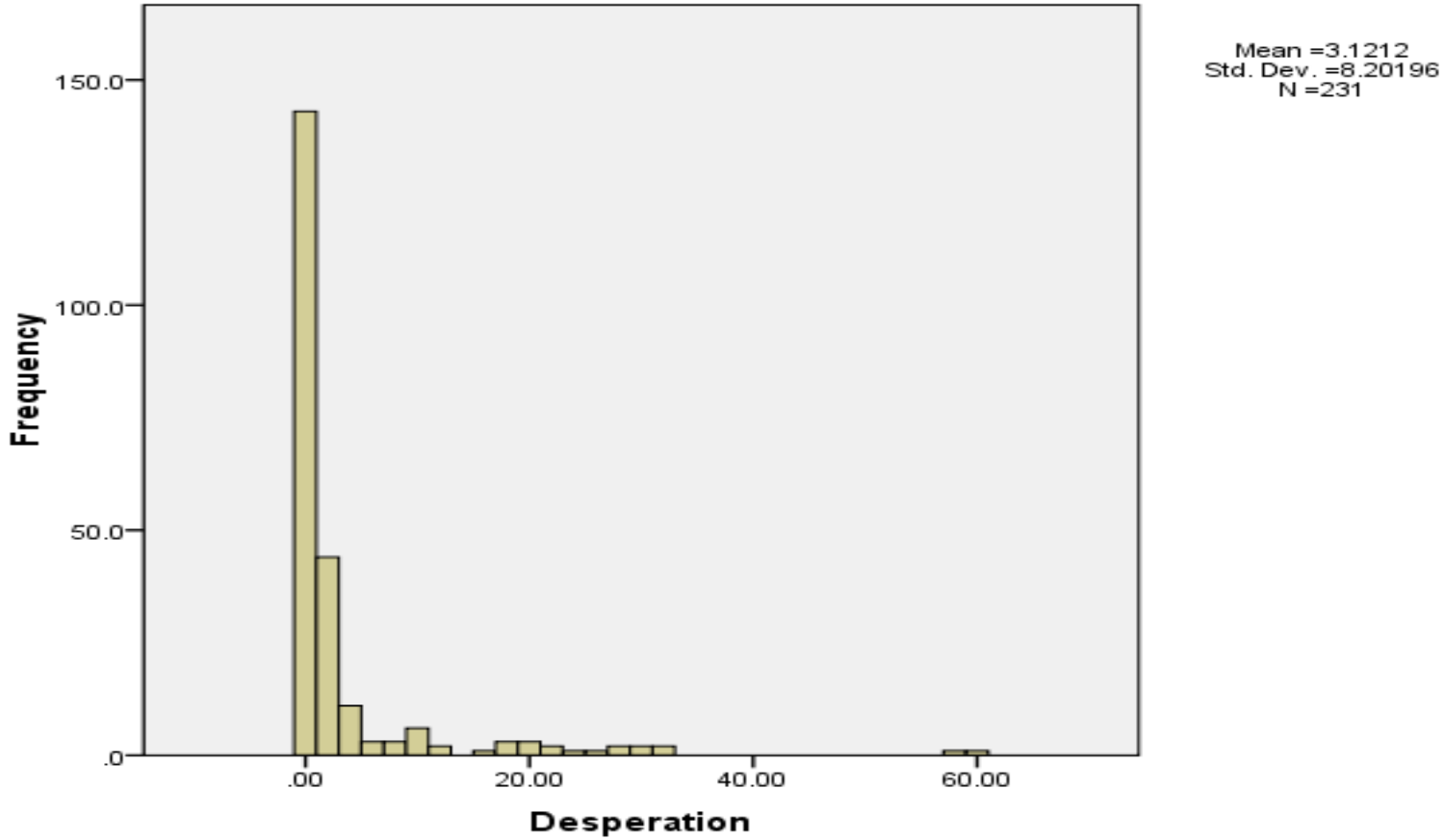
Desperation distribution



LIMITED ACCESS TO COMMON RISK MANAGEMENT STRATEGIES

- Risk management strategies usually entail problem solving skills training to enhance cognitive flexibility
- Restricted menu of options for acute crisis management
  - Limited recreational activities
  - Restricted communication with social support
  - Constrained options for A/E process, in addition to increased risk during movement

RECOMMENDATIONS

Summary

- Adaptability and flexibility are key
- Context and setting are critical variables in risk management strategies
  - What works in the US does not necessarily work in a combat zone

Recommendations

- Combat increases fearlessness about death and the capability for suicide
  - Interventions should target the desire for suicide
- Easy access to firearms and other lethal means
  - Means restriction is likely to be less effective, and should therefore be utilized with extreme caution
- Insomnia and agitation are common in combat zones, and can be adaptive
  - Interventions must be appropriate and fit within mission demands

Recommendations

- Certain forms of external support and crisis management techniques are limited
  - Modifications must be made to acutely manage suicide risk
- Suicidal behaviors cannot be predicted
  - Adopt a suicide risk assessment approach

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