

Bundeswehrkrankenhaus BERLIN

Suicidality in the German Armed Forces and approaches for suicidal prevention

Helms C, Wesemann U, Zimmermann PL, Willmund GD

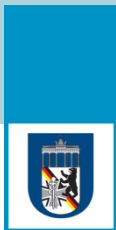
Center for Military Mental Health, German Armed Forces Hospital Berlin, Germany



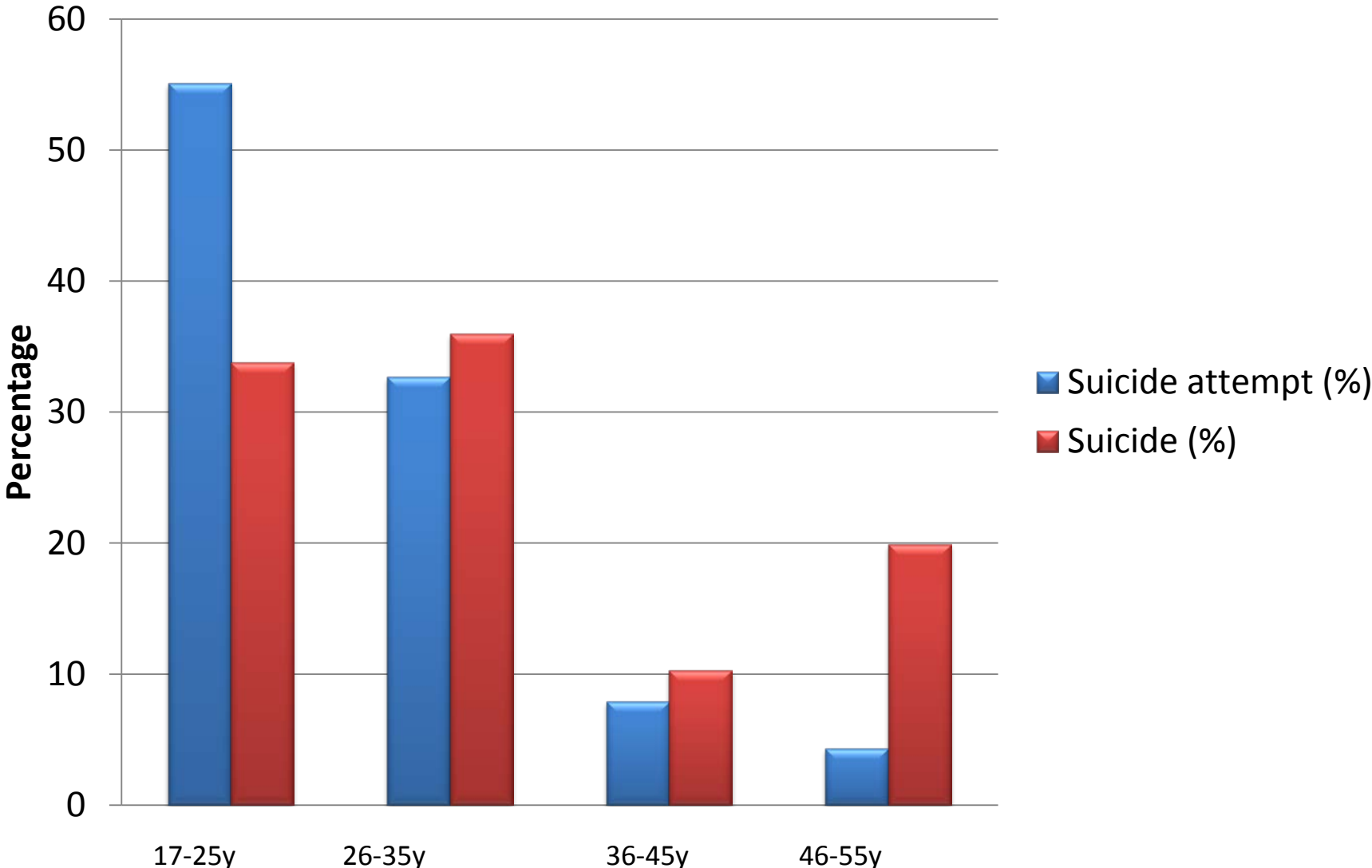


- Military Medical Statistic Institute stores all medical records of former and fallen soldiers
- 3 independent persons examined every „death- case“ (medical documentation assistant, general practitioner and psychiatrist)
- Records contained
 - special event report
 - suicide-form
 - past medical history (only for former soldiers)
 - autopsy reports (if existing)
- N= 390 cases
 - suicides 2010-2015 (n=136)
 - suicide attempts 2010-2015 (n=254)

Results: Age structure in suicides and suicide attempts

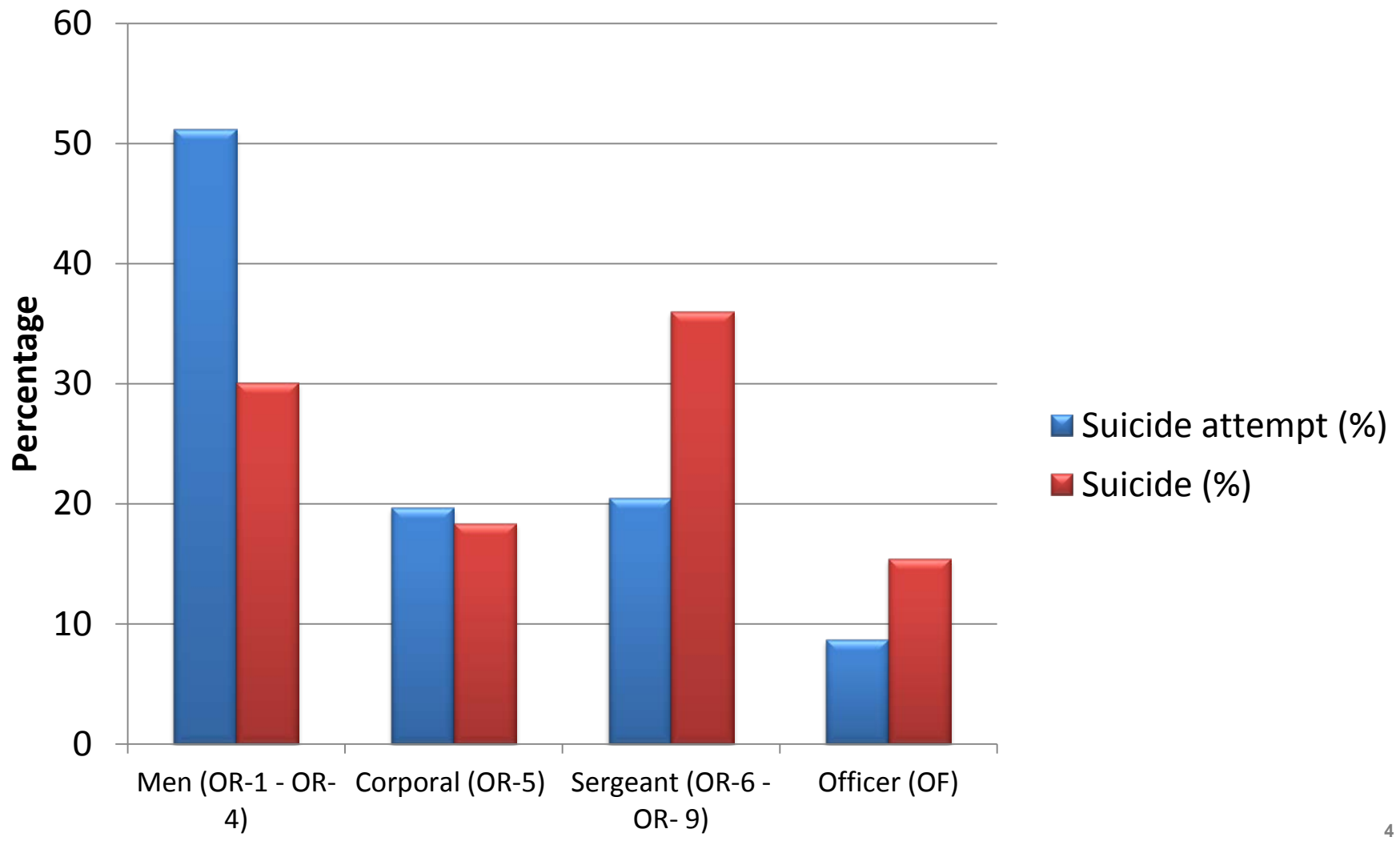


Age band





Military rank



Selected results: Medical background



	Suicide attempt (%)	Suicide (%)	p-value
N = 390	254 (65.1)	136 (34.9)	
Gender (male/female)	211 (83.1)/ 43 (16.9)	135 (99.3)/ 1 (0.7)	<.0001
Time of service band:			<.0001
1-6 years	189 (74.4)	65 (48.1)	
>20 years	16 (6.3)	33 (24.4)	
ICD-10 group:			.688
F3	53 (42.1)	31 (39.7)	
F4	56 (44.4)	40 (51.3)	
PTSD	11 (5.2)	3 (3.6)	.567
Psychotherapeutic treatment:			.277
None	154 (69.7)	86 (71.1)	
Consultation within the last month:			
Military GP (within the last month)	82 (68.9)	49 (39.2)	<.0001
Psychiatrist consultation	43 (30.1)	45 (33.8)	.527

Selected results: socio-economic background



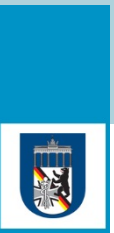
	Suicide attempt (%)	Suicide (%)	p-value
Accompanying conflicts/situation:			
Private conflicts	204 (90.7)	80 (81.6)	.022
Official conflicts	77 (39.9)	21 (19.4)	<.0001
Problems with the military structure	45 (21.6)	17 (14.2)	<.0001
End of duty	11 (4.6)	14 (30.4)	<.0001
During basic training	14 (5.5)	4 (3.0)	.255
Deployment history:			
Abroad missions in the past	28 (14.1)	43 (31.9)	<.0001
More than 1 mission	9 (4,8)	17 (12.5)	<.0001
Symptoms in returnee check-up	2 (1.2)	9 (7.7)	<.0001
Social background:			
Graduation: middle school or higher	95 (62.5)	103 (76,8)	.003
Broken home	38 (38.8)	23 (30.3)	.243
Alcoholics in family	28 (38.9)	22 (21.4)	.021
Actual relationship	68 (32.7)	47 (44.8)	.037
Children	32 (21.9)	36 (27.7)	.266
Mental disorders in the family	27 (29.7)	21 (26.9)	.693
Suicide attempts in the family	4 (4.1)	4 (5.6)	.639

Results: Suicide profile



	Suicide attempt (%)	Suicide (%)	p-value
Type of self harm:			<.0001
Pills	99 (39.0)	6 (4.4)	
Drugs	2 (0.8)	2 (1.5)	
Cuts along the wrists	78 (30.7)	2 (1.5)	
Other cuts	9 (3.5)	3 (1.5)	
Hanging	17 (6.7)	48 (35.3)	
Jumping	10 (3.9)	7 (5.1)	
Provoked motoring accident	12 (4.7)	8 (5.9)	
Shooting	3 (1.2)	18 (13.2)	
CO-intoxication	12 (4.7)	9 (6.6)	
Suffocation	2 (0.8)	6 (4.4)	
Run over by train	1 (0.4)	18 (13.2)	
Other	9 (3.5)	5 (3.7)	

Results: Regression model (forward selection)



68 suicide cases + 125 suicide attempt cases were included

Item	Wald	Degrees of freedom (df)	Significance
Age group	25.366	1	<.001
Psychotherapeutic treatment	9.626	3	.022
Professional conflicts	9.430	1	.002
Number of missions	16.387	5	.006

r^2 suicide cases = .67

r^2 suicide attempt cases = .85

r^2 in total = .79



- Varying quality in documentation
- No self assessment from the regarding soldier
- Only estimations from 3rd persons (superior, doctor)
- Only information about active soldiers
 - no follow-ups in military reserve or retired soldiers
 - reintegration stress (Haller et al., 2015)
- Large number of estimated unreported suicide attempts must be suspected
 - no closer evaluation
 - 10x higher rates expected (Zøllner, Ejdesgaard and Jørgensen, 2014)



- Open information about acute care-offers (emergency hotlines)
- Focus on the post suicide attempt care (regarding soldier and surrounding)
- Encouragement of soldiers to use the post-deployment rehabilitation options
- Educational events for military leaders
- Advanced medical training in local medical facilities
 - diagnostic procedures (especially for depression)
 - medical treatment



- Phase 1: Conceptualization
 - planning and implementation
 - data collection and evaluation
- Phase 2: Pilot projects at 7 different locations
- Phase 3: Evaluation and intervention adjustment
- Phase 4: Implementation in all 257 military sites
 - sustainable, project-independent implementation



- Cooperation with the European Alliance Against Depression (Hegerl, Leipzig/Germany)
 - adaptation of the well established 4-level civil prevention program
- Targets of the 4-level prevention program:
 1. military general practitioner- training
 2. public awareness campaigns
 3. Gatekeeper (PSN) training for community facilitators
 4. increasing help options for people with depression (acute care, emergency programs, networking)

<https://www.youtube.com/watch?v=b9eFNB6hev8>



Thanks for your attention!