WEBVTT

NOTE duration:"00:58:16.1600000"

NOTE language:en-us

NOTE Confidence: 0.86088896

00:00:00.000 --> 00:00:00.930 Few brief announcements.

NOTE Confidence: 0.86088896

00:00:00.930 --> 00:00:02.790 Before I introduce today's speaker fleet,

NOTE Confidence: 0.86088896

00:00:02.790 --> 00:00:04.736 please first take a moment to ensure

NOTE Confidence: 0.86088896

00:00:04.736 --> 00:00:06.940 that you are muted in order to

NOTE Confidence: 0.86088896

00:00:06.940 --> 00:00:08.580 receive CME credit for attendance,

NOTE Confidence: 0.86088896

00:00:08.580 --> 00:00:10.715 please see the chat room for instructions.

NOTE Confidence: 0.86088896

00:00:10.720 --> 00:00:13.000 You can text the unique ID for this

NOTE Confidence: 0.86088896

00:00:13.000 --> 00:00:14.592 conference anytime until 3:15 if

NOTE Confidence: 0.86088896

00:00:14.592 --> 00:00:16.207 you're not already registered with,

NOTE Confidence: 0.86088896

00:00:16.210 --> 00:00:19.260 he'll see me you will need to do that first.

NOTE Confidence: 0.86088896

00:00:19.260 --> 00:00:20.785 If you have any questions

NOTE Confidence: 0.86088896

00:00:20.785 --> 00:00:21.700 during the presentation,

NOTE Confidence: 0.86088896

00:00:21.700 --> 00:00:24.211 I encourage you to make use of the chat

NOTE Confidence: 0.86088896

00:00:24.211 --> 00:00:26.844 room throughout the hour and will have

NOTE Confidence: 0.86088896

00:00:26.844 --> 00:00:29.287 you either unmute yourself or I can

NOTE Confidence: 0.86088896

00:00:29.287 --> 00:00:31.282 read aloud the questions at the end.

NOTE Confidence: 0.86088896

00:00:31.290 --> 00:00:32.088 And finally,

NOTE Confidence: 0.86088896

00:00:32.088 --> 00:00:34.482 please feel free to share these

NOTE Confidence: 0.86088896

00:00:34.482 --> 00:00:36.718 announcements for our lecture series with

NOTE Confidence: 0.86088896

00:00:36.718 --> 00:00:39.739 anyone else who you think may be interested.

NOTE Confidence: 0.86088896

00:00:39.740 --> 00:00:41.972 Or contact W Lovejoy to be

NOTE Confidence: 0.86088896

00:00:41.972 --> 00:00:43.960 added to our email list.

NOTE Confidence: 0.86088896

00:00:43.960 --> 00:00:46.599 So this afternoon I have the pleasure

NOTE Confidence: 0.86088896

00:00:46.599 --> 00:00:48.570 of introducing Doctor Jacob Colin.

NOTE Confidence: 0.86088896

00:00:48.570 --> 00:00:50.747 Doctor Colin is a Pro is program

NOTE Confidence: 0.86088896

00:00:50.747 --> 00:00:52.642 director for the Sleep Medicine

NOTE Confidence: 0.86088896

00:00:52.642 --> 00:00:54.867 Fellowship at the Walter Reed

NOTE Confidence: 0.86088896

00:00:54.867 --> 00:00:57.033 National Military Medical Center in

NOTE Confidence: 0.86088896

00:00:57.033 --> 00:00:58.938 Bethesda and completed his medical

NOTE Confidence: 0.86088896

00:00:58.938 --> 00:01:00.826 degree from the Uniformed Services

NOTE Confidence: 0.86088896

00:01:00.826 --> 00:01:02.298 University Anas pulmonary critical

NOTE Confidence: 0.86088896

00:01:02.298 --> 00:01:04.400 Care and Sleep Medicine Fellowships.

NOTE Confidence: 0.86088896

00:01:04.400 --> 00:01:05.900 At Walter Reed.

NOTE Confidence: 0.86088896

00:01:05.900 --> 00:01:08.782 His areas of research interest include

NOTE Confidence: 0.86088896

00:01:08.782 --> 00:01:10.718 the relationship between sleep

NOTE Confidence: 0.86088896

00:01:10.718 --> 00:01:12.890 disordered breathing and PTSD sleep,

NOTE Confidence: 0.86088896

00:01:12.890 --> 00:01:15.200 disordered breathing, and CPAP adherence.

NOTE Confidence: 0.86088896

00:01:15.200 --> 00:01:17.515 An respiratory symptoms and disorders

NOTE Confidence: 0.86088896

00:01:17.515 --> 00:01:19.834 that are related to deployment.

NOTE Confidence: 0.86088896

00:01:19.834 --> 00:01:22.169 He's an active clinical educator

NOTE Confidence: 0.86088896

00:01:22.169 --> 00:01:24.459 for trainees at all levels.

NOTE Confidence: 0.86088896

00:01:24.460 --> 00:01:26.848 He spoken widely on and published

NOTE Confidence: 0.86088896

00:01:26.848 --> 00:01:29.675 widely as well on various topics

NOTE Confidence: 0.86088896

00:01:29.675 --> 00:01:31.406 across Sleep Medicine,

NOTE Confidence: 0.86088896

00:01:31.410 --> 00:01:33.338 ranging from emerging sleep

NOTE Confidence: 0.86088896

00:01:33.338 --> 00:01:35.266 technologies to sleep disordered

NOTE Confidence: 0.86088896

00:01:35.266 --> 00:01:37.890 breathing to forensic Sleep Medicine.

NOTE Confidence: 0.86088896

00:01:37.890 --> 00:01:40.340 He serves as associate editor for the

NOTE Confidence: 0.86088896

00:01:40.340 --> 00:01:42.379 Journal of Clinical Sleep Medicine.

NOTE Confidence: 0.86088896

00:01:42.380 --> 00:01:45.054 Ann is on the editorial board for

NOTE Confidence: 0.86088896

00:01:45.054 --> 00:01:47.240 Behavioral Sleep Medicine this past year.

NOTE Confidence: 0.86088896

00:01:47.240 --> 00:01:47.974 In 2020,

NOTE Confidence: 0.86088896

00:01:47.974 --> 00:01:50.176 he was honored with a distinguished

NOTE Confidence: 0.86088896

00:01:50.176 --> 00:01:51.350 Chest Educator Award,

NOTE Confidence: 0.86088896

00:01:51.350 --> 00:01:53.888 and he's also received the Stuart

NOTE Confidence: 0.86088896

00:01:53.888 --> 00:01:56.040 Quan Award for Editorial Excellence

NOTE Confidence: 0.86088896

00:01:56.040 --> 00:01:57.560 from the JC SM.

NOTE Confidence: 0.86088896

00:01:57.560 --> 00:01:59.784 And so it's a real pleasure to have

NOTE Confidence: 0.86088896

00:01:59.784 --> 00:02:01.680 Doctor Colin here to share his

NOTE Confidence: 0.86088896

00:02:01.680 --> 00:02:03.275 expertise about the unique aspects

NOTE Confidence: 0.86088896

00:02:03.275 --> 00:02:05.461 of managing sleep disordered sleep

NOTE Confidence: 0.86088896

00:02:05.461 --> 00:02:07.721 disorders in military and veteran

NOTE Confidence: 0.86088896

00:02:07.721 --> 00:02:09.596 populations. With us this afternoon.

NOTE Confidence: 0.86088896

00:02:09.596 --> 00:02:12.778 And with that, I'll turn it over to him.

NOTE Confidence: 0.86088896

00:02:12.780 --> 00:02:14.910 Thanks again for joining us, Jacob.

NOTE Confidence: 0.8595306

00:02:16.080 --> 00:02:17.440 Thanks for having me Lauren.

NOTE Confidence: 0.8595306

00:02:17.440 --> 00:02:19.430 I've been looking forward to

NOTE Confidence: 0.8595306

00:02:19.430 --> 00:02:21.800 speaking with all of you and.

NOTE Confidence: 0.8595306

00:02:21.800 --> 00:02:23.510 And it's a complicated topic,

NOTE Confidence: 0.8595306

00:02:23.510 --> 00:02:25.202 but hopefully I can shed some

NOTE Confidence: 0.8595306

00:02:25.202 --> 00:02:27.186 light on kind of the different

NOTE Confidence: 0.8595306

00:02:27.186 --> 00:02:29.151 sleep disorders and sleep issues

NOTE Confidence: 0.8595306

00:02:29.151 --> 00:02:31.380 that we encounter in the military,

NOTE Confidence: 0.8595306

00:02:31.380 --> 00:02:33.348 and I think their relevance to

NOTE Confidence: 0.8595306

00:02:33.348 --> 00:02:35.056 everybody because I'm as these

NOTE Confidence: 0.8595306

00:02:35.056 --> 00:02:37.060 folks filter out of the military

NOTE Confidence: 0.8595306

00:02:37.060 --> 00:02:38.900 and they separate from service.

NOTE Confidence: 0.8595306

00:02:38.900 --> 00:02:40.937 They'll be treated not only at the

NOTE Confidence: 0.8595306

00:02:40.937 --> 00:02:42.660 through the Veterans Administration,

NOTE Confidence: 0.8595306

00:02:42.660 --> 00:02:43.972 their Veterans Affairs hospitals,

NOTE Confidence: 0.8595306

00:02:43.972 --> 00:02:46.703 but also in private practice and kind of

NOTE Confidence: 0.8595306

00:02:46.703 --> 00:02:48.478 in multiple different healthcare settings.

NOTE Confidence: 0.8595306

00:02:48.480 --> 00:02:50.556 So it's important that sleep physicians

NOTE Confidence: 0.8595306

00:02:50.556 --> 00:02:52.580 know about this population in general.

NOTE Confidence: 0.83673084

00:02:54.720 --> 00:02:57.429 So here's some of the details for the CME.

NOTE Confidence: 0.83673084

00:02:57.430 --> 00:02:59.738 I have no disclosures.

NOTE Confidence: 0.83673084

00:02:59.740 --> 00:03:02.134 And my objectives to really understand the

NOTE Confidence: 0.83673084

00:03:02.134 --> 00:03:04.848 culture of sleep deprivation in the military,

NOTE Confidence: 0.83673084

00:03:04.850 --> 00:03:07.196 and there's certainly we're learning more

NOTE Confidence: 0.83673084

00:03:07.196 --> 00:03:09.482 and more about understanding the culture

NOTE Confidence: 0.83673084

00:03:09.482 --> 00:03:11.785 of sleep deprivation in society at large.

NOTE Confidence: 0.83673084

00:03:11.790 --> 00:03:13.440 And there are some interesting

NOTE Confidence: 0.83673084

00:03:13.440 --> 00:03:15.455 differences that come up with the

NOTE Confidence: 0.83673084

00:03:15.455 --> 00:03:17.303 history of sleep deprivation in the

NOTE Confidence: 0.83673084

00:03:17.303 --> 00:03:19.241 military and the complicated relationship

NOTE Confidence: 0.83673084

00:03:19.241 --> 00:03:21.636 between sleep and combat operations,

NOTE Confidence: 0.83673084

00:03:21.640 --> 00:03:25.408 and how this then leads into the sleep

NOTE Confidence: 0.83673084

00:03:25.408 --> 00:03:28.489 disorders that we see in the military.

NOTE Confidence: 0.83673084

00:03:28.490 --> 00:03:30.300 And and specifically in patients

NOTE Confidence: 0.83673084

00:03:30.300 --> 00:03:32.110 who have PTSD and TBI.

NOTE Confidence: 0.83673084

00:03:32.110 --> 00:03:34.966 And it's important to appreciate that in

NOTE Confidence: 0.83673084

00:03:34.966 --> 00:03:38.696 in a lot of the literature you'll see.

NOTE Confidence: 0.83673084

00:03:38.700 --> 00:03:40.855 They'll oftentimes sort of breakdown

NOTE Confidence: 0.83673084

00:03:40.855 --> 00:03:42.579 populations as obstructive sleep

NOTE Confidence: 0.83673084

00:03:42.579 --> 00:03:44.795 apnea and CPAP adherence in patients

NOTE Confidence: 0.83673084

00:03:44.795 --> 00:03:46.520 with PTSD or sleep disorders.

NOTE Confidence: 0.83673084

00:03:46.520 --> 00:03:48.608 Among veterans with TBI and usually

NOTE Confidence: 0.83673084

00:03:48.608 --> 00:03:50.820 this is a messy population,

NOTE Confidence: 0.83673084

00:03:50.820 --> 00:03:53.319 and that's part of what limits the

NOTE Confidence: 0.83673084

00:03:53.319 --> 00:03:56.202 quality of the research, is it?

NOTE Confidence: 0.83673084

00:03:56.202 --> 00:03:59.448 Most of these patients have both

NOTE Confidence: 0.83673084

00:03:59.448 --> 00:04:01.100 PTSD and TBI.

NOTE Confidence: 0.83673084

00:04:01.100 --> 00:04:03.144 And they're on a number of medications

NOTE Confidence: 0.83673084

00:04:03.144 --> 00:04:04.707 that can affect sleep architecture

NOTE Confidence: 0.83673084

00:04:04.707 --> 00:04:06.905 and then make it difficult to have

NOTE Confidence: 0.83673084

00:04:06.905 --> 00:04:08.882 sort of clean populations for

NOTE Confidence: 0.83673084

00:04:08.882 --> 00:04:10.088 randomized clinical trials.

NOTE Confidence: 0.8284778

00:04:12.500 --> 00:04:16.119 So, First off, we've there's so many

NOTE Confidence: 0.8284778

00:04:16.119 --> 00:04:18.827 examples throughout society where we sort

NOTE Confidence: 0.8284778

00:04:18.827 --> 00:04:22.290 of see this notion of sleep as a weakness,

NOTE Confidence: 0.8284778

00:04:22.290 --> 00:04:24.846 and being able to sort of

NOTE Confidence: 0.8284778

00:04:24.846 --> 00:04:27.190 stay engaged and stay alert.

NOTE Confidence: 0.8284778

00:04:27.190 --> 00:04:30.690 You know, in spite of sleep deprivation

NOTE Confidence: 0.8284778

00:04:30.690 --> 00:04:35.356 is a sign of stamina and even manliness.

NOTE Confidence: 0.8284778

00:04:35.360 --> 00:04:36.970 And when people fall asleep,

NOTE Confidence: 0.8284778

00:04:36.970 --> 00:04:38.580 you know their their teas.

NOTE Confidence: 0.8284778

00:04:38.580 --> 00:04:41.514 Who made fun of an and or viewed as

NOTE Confidence: 0.8284778

00:04:41.514 --> 00:04:44.562 may be weaker or not quite not as

NOTE Confidence: 0.8284778

00:04:44.562 --> 00:04:47.537 resilient or as solid of an employee.

NOTE Confidence: 0.8284778

00:04:47.540 --> 00:04:49.580 It is definitely different specialties

NOTE Confidence: 0.8284778

00:04:49.580 --> 00:04:52.352 of medicine where the culture you know

NOTE Confidence: 0.8284778

00:04:52.352 --> 00:04:54.368 really really pushes that I remember

NOTE Confidence: 0.8284778

00:04:54.368 --> 00:04:56.444 in medical school you know pulling

NOTE Confidence: 0.8284778

00:04:56.444 --> 00:04:58.460 all nighters to study and having

NOTE Confidence: 0.8284778

00:04:58.460 --> 00:05:01.532 friends tease me if I fell asleep or

NOTE Confidence: 0.8284778

00:05:01.532 --> 00:05:04.645 bang pots over my head to wake me up.

NOTE Confidence: 0.8284778

00:05:04.650 --> 00:05:06.936 You know to play joke on me if I

NOTE Confidence: 0.8284778

00:05:06.936 --> 00:05:09.192 fall asleep while studying and I had

NOTE Confidence: 0.8284778

00:05:09.192 --> 00:05:11.558 given a talk on sleeping performance

NOTE Confidence: 0.8284778

00:05:11.558 --> 00:05:14.063 to the special Operations Medical

NOTE Confidence: 0.8284778

00:05:14.063 --> 00:05:16.346 Community and they were really

NOTE Confidence: 0.8284778

00:05:16.346 --> 00:05:18.286 interested in knowing about you.

NOTE Confidence: 0.8284778

00:05:18.290 --> 00:05:20.530 What's the history of sleep in the

NOTE Confidence: 0.8284778

00:05:20.530 --> 00:05:22.880 military in terms of when did the

NOTE Confidence: 0.8284778

00:05:22.880 --> 00:05:25.258 military start becoming aware of sleep as

NOTE Confidence: 0.8284778

00:05:25.258 --> 00:05:27.826 a weapon and as a weakness or vulnerability,

NOTE Confidence: 0.8284778

00:05:27.830 --> 00:05:30.126 and what did they do about it?

NOTE Confidence: 0.8284778

00:05:30.130 --> 00:05:33.756 And I had gotten in touch with.

NOTE Confidence: 0.8284778

00:05:33.760 --> 00:05:35.230 A few different military historians.

NOTE Confidence: 0.8284778

00:05:35.230 --> 00:05:36.700 I knew that you know.

NOTE Confidence: 0.8284778

00:05:36.700 --> 00:05:37.932 We've had the same.

NOTE Confidence: 0.8284778

00:05:37.932 --> 00:05:40.110 A military historian who's been at useless

NOTE Confidence: 0.8284778

00:05:40.110 --> 00:05:42.522 at the Med school for a few decades and

NOTE Confidence: 0.8284778

00:05:42.584 --> 00:05:44.635 he didn't answer my emails at first.

NOTE Confidence: 0.8284778

00:05:44.640 --> 00:05:46.110 But when I finally finally,

NOTE Confidence: 0.8284778

00:05:46.110 --> 00:05:46.698 he responded.

NOTE Confidence: 0.8284778

00:05:46.698 --> 00:05:48.168 He said there's really no,

NOTE Confidence: 0.8284778

00:05:48.170 --> 00:05:48.419 no,

NOTE Confidence: 0.8284778

00:05:48.419 --> 00:05:50.411 no good history or no one that really

NOTE Confidence: 0.8284778

00:05:50.411 --> 00:05:52.583 writes about this topic and I also

NOTE Confidence: 0.8284778

00:05:52.583 --> 00:05:54.207 contacted the military historian at

NOTE Confidence: 0.8284778

00:05:54.207 --> 00:05:55.807 the Command General Staff College.

NOTE Confidence: 0.8284778

00:05:55.810 --> 00:05:57.046 It's a professional school.

NOTE Confidence: 0.8284778

00:05:57.046 --> 00:05:59.879 We have to go through and as we move up

NOTE Confidence: 0.8284778

00:05:59.879 --> 00:06:02.021 the ranks in the Army and that military

NOTE Confidence: 0.8284778

00:06:02.021 --> 00:06:04.169 historian also had no new insights.

NOTE Confidence: 0.8284778

00:06:04.170 --> 00:06:06.725 But our medical librarian at the hospital,

NOTE Confidence: 0.8284778

00:06:06.730 --> 00:06:08.194 who's incredibly resourceful found

NOTE Confidence: 0.8284778

00:06:08.194 --> 00:06:10.390 a nice article by this author.

NOTE Confidence: 0.8284778

00:06:10.390 --> 00:06:11.882 Alan Derickson,

NOTE Confidence: 0.8284778

00:06:11.882 --> 00:06:14.850 who's a social scientist at Penn State

NOTE Confidence: 0.8284778

00:06:14.850 --> 00:06:18.190 and he wrote this book dangerously sleepy.

NOTE Confidence: 0.8284778

00:06:18.190 --> 00:06:21.202 And he's also written a great

NOTE Confidence: 0.8284778

00:06:21.202 --> 00:06:24.569 article about sleep in the military.

NOTE Confidence: 0.8284778

00:06:24.570 --> 00:06:26.922 And so when we think about how

NOTE Confidence: 0.8284778

00:06:26.922 --> 00:06:29.260 are we doing in the military,

NOTE Confidence: 0.8284778

00:06:29.260 --> 00:06:31.787 we have a very sleep deprived population.

NOTE Confidence: 0.8284778

00:06:31.790 --> 00:06:34.670 An if you make this sort of rough

NOTE Confidence: 0.8284778

00:06:34.670 --> 00:06:36.520 correlation between how much do

NOTE Confidence: 0.8284778

00:06:36.520 --> 00:06:38.644 people sleep on average in general,

NOTE Confidence: 0.8284778

00:06:38.650 --> 00:06:40.450 you know this is variable,

NOTE Confidence: 0.8284778

00:06:40.450 --> 00:06:42.942 but probably about 2/3 of the population

NOTE Confidence: 0.8284778

00:06:42.942 --> 00:06:45.668 is getting 7-8 hours of sleep a night

NOTE Confidence: 0.8284778

00:06:45.668 --> 00:06:48.040 or certainly more than six habitually,

NOTE Confidence: 0.8284778

00:06:48.040 --> 00:06:49.120 and by contrast,

NOTE Confidence: 0.8284778

00:06:49.120 --> 00:06:50.200 in the military,

NOTE Confidence: 0.8284778

00:06:50.200 --> 00:06:52.270 probably 3/4 of the militaries

NOTE Confidence: 0.8284778

00:06:52.270 --> 00:06:54.340 getting is habitually getting less

NOTE Confidence: 0.8284778

00:06:54.409 --> 00:06:56.446 than six hours of sleep a night.

NOTE Confidence: 0.8284778

00:06:56.450 --> 00:06:58.030 And a substantial portion,

NOTE Confidence: 0.8284778

00:06:58.030 --> 00:06:58.820 you know,

NOTE Confidence: 0.8284778

00:06:58.820 --> 00:07:01.980 a little bit less than 50% are constantly

NOTE Confidence: 0.8284778

00:07:01.980 --> 00:07:04.745 getting less than five hours a night,

NOTE Confidence: 0.8284778

00:07:04.750 --> 00:07:06.885 and there's been interesting performance

NOTE Confidence: 0.8284778

00:07:06.885 --> 00:07:09.830 research that looks at sleep deprivation.

NOTE Confidence: 0.8284778

00:07:09.830 --> 00:07:12.210 And which is a whole other lecture.

NOTE Confidence: 0.8284778

00:07:12.210 --> 00:07:12.958 You know,

NOTE Confidence: 0.8284778

00:07:12.958 --> 00:07:15.202 the impact of sleep deprivation and

NOTE Confidence: 0.8284778

00:07:15.202 --> 00:07:16.902 performance and what they found

NOTE Confidence: 0.8284778

00:07:16.902 --> 00:07:18.960 is we're sort of rote tasks like

NOTE Confidence: 0.86251837

00:07:19.030 --> 00:07:21.396 breaking down a weapon and putting it

NOTE Confidence: 0.86251837

00:07:21.396 --> 00:07:23.770 back together and loading and aiming a

NOTE Confidence: 0.86251837

00:07:23.770 --> 00:07:25.470 firearm and and marksmanship inaccuracy.

NOTE Confidence: 0.86251837

00:07:25.470 --> 00:07:27.450 That sleep doesn't have a huge

NOTE Confidence: 0.86251837

00:07:27.450 --> 00:07:29.550 effect on performance in these areas,

NOTE Confidence: 0.86251837

00:07:29.550 --> 00:07:31.590 but where you do see an

NOTE Confidence: 0.86251837

00:07:31.590 --> 00:07:32.610 effect is decision-making,

NOTE Confidence: 0.86251837

00:07:32.610 --> 00:07:34.650 so when they've done sleep deprivation,

NOTE Confidence: 0.86251837

00:07:34.650 --> 00:07:36.350 work with the Navy seals,

NOTE Confidence: 0.86251837

00:07:36.350 --> 00:07:38.050 for instance during hell week,

NOTE Confidence: 0.86251837

00:07:38.050 --> 00:07:40.180 where they have 72 hours of.

NOTE Confidence: 0.86251837

00:07:40.180 --> 00:07:41.230 Of sleep deprivation,

NOTE Confidence: 0.86251837

00:07:41.230 --> 00:07:43.330 they found that that these trainees

NOTE Confidence: 0.86251837

00:07:43.330 --> 00:07:45.644 are in live fire exercises or

NOTE Confidence: 0.86251837

00:07:45.644 --> 00:07:46.784 simulated combat exercises.

NOTE Confidence: 0.86251837

00:07:46.790 --> 00:07:48.620 Their accuracy doesn't really diminish

NOTE Confidence: 0.86251837

00:07:48.620 --> 00:07:50.084 with progressive sleep deprivation,

NOTE Confidence: 0.86251837

00:07:50.090 --> 00:07:52.286 but their choice of target does,

NOTE Confidence: 0.86251837

00:07:52.290 --> 00:07:54.120 so they start picking the

NOTE Confidence: 0.86251837

00:07:54.120 --> 00:07:55.584 wrong target more often,

NOTE Confidence: 0.86251837

00:07:55.590 --> 00:07:57.798 hitting the friendly target you know,

NOTE Confidence: 0.86251837

00:07:57.800 --> 00:07:59.264 shooting the wrong person,

NOTE Confidence: 0.86251837

00:07:59.264 --> 00:08:01.094 which is a big deal,

NOTE Confidence: 0.86251837

00:08:01.100 --> 00:08:01.467 obviously,

NOTE Confidence: 0.86251837

00:08:01.467 --> 00:08:02.935 and their insight about

NOTE Confidence: 0.86251837

00:08:02.935 --> 00:08:04.770 what they're doing is loss,

NOTE Confidence: 0.86251837

00:08:04.770 --> 00:08:06.226 so they'll their perception

NOTE Confidence: 0.86251837

00:08:06.226 --> 00:08:08.410 as they go through 72 hours

NOTE Confidence: 0.86251837

00:08:08.479 --> 00:08:10.399 of sleep deprivation is that.

NOTE Confidence: 0.86251837

00:08:10.400 --> 00:08:11.692 Their performance hasn't changed

NOTE Confidence: 0.86251837

00:08:11.692 --> 00:08:13.630 and they're doing fine when in

NOTE Confidence: 0.86251837

00:08:13.686 --> 00:08:15.564 actuality you know the an observer

NOTE Confidence: 0.86251837

00:08:15.564 --> 00:08:17.567 running the experiment can see that

NOTE Confidence: 0.86251837

00:08:17.567 --> 00:08:19.312 there's a progressive decrement in

NOTE Confidence: 0.86251837

00:08:19.312 --> 00:08:21.124 performance with regards to these

NOTE Confidence: 0.86251837

00:08:21.124 --> 00:08:23.416 complex decisions that can lead to

NOTE Confidence: 0.86251837

00:08:23.416 --> 00:08:25.613 friendly fire incidents and shooting

NOTE Confidence: 0.86251837

00:08:25.613 --> 00:08:27.878 civilians and things like this.

NOTE Confidence: 0.86251837

00:08:27.880 --> 00:08:29.550 So it's decision making that's

NOTE Confidence: 0.86251837

00:08:29.550 --> 00:08:30.218 really impacted,

NOTE Confidence: 0.86251837

00:08:30.220 --> 00:08:32.350 and generally you know when we

NOTE Confidence: 0.86251837

00:08:32.350 --> 00:08:34.746 think about the patients we see in

NOTE Confidence: 0.86251837

00:08:34.746 --> 00:08:36.552 our sleep clinic at Walter Reed,

NOTE Confidence: 0.86251837

00:08:36.560 --> 00:08:38.570 I would say many of them,

NOTE Confidence: 0.86251837

00:08:38.570 --> 00:08:39.902 especially officers and senior

NOTE Confidence: 0.86251837

00:08:39.902 --> 00:08:41.567 enlisted folks in leadership position,

NOTE Confidence: 0.86251837

00:08:41.570 --> 00:08:43.180 are getting around five hours

NOTE Confidence: 0.86251837

00:08:43.180 --> 00:08:45.192 of sleep a night habitually and

NOTE Confidence: 0.86251837

00:08:45.192 --> 00:08:46.887 sometimes catching up on the

NOTE Confidence: 0.86251837

00:08:46.887 --> 00:08:48.243 weekends and sometimes not.

NOTE Confidence: 0.86251837

00:08:48.250 --> 00:08:49.252 And there's literature,

NOTE Confidence: 0.86251837

00:08:49.252 --> 00:08:51.590 both in GME and in the military,

NOTE Confidence: 0.86251837

00:08:51.590 --> 00:08:53.200 showing that you know anything

NOTE Confidence: 0.86251837

00:08:53.200 --> 00:08:55.219 if you're getting less than four

NOTE Confidence: 0.86251837

00:08:55.219 --> 00:08:56.599 hours of sleep habitually.

NOTE Confidence: 0.86251837

00:08:56.600 --> 00:08:58.530 Not a huge difference from.

NOTE Confidence: 0.86251837

00:08:58.530 --> 00:08:59.738 Zero hours of sleep,

NOTE Confidence: 0.86251837

00:08:59.738 --> 00:09:01.550 kind of on a one night,

NOTE Confidence: 0.86251837

00:09:01.550 --> 00:09:02.770 a single night basis,

NOTE Confidence: 0.86251837

00:09:02.770 --> 00:09:04.972 and then when you start looking at

NOTE Confidence: 0.86251837

00:09:04.972 --> 00:09:06.802 that habitually of getting less than

NOTE Confidence: 0.86251837

00:09:06.802 --> 00:09:09.398 four hours of sleep over a number of days,

NOTE Confidence: 0.86251837

00:09:09.400 --> 00:09:11.325 you see a steep decline in cognitive

NOTE Confidence: 0.86251837

00:09:11.325 --> 00:09:13.029 performance and mood and irritability.

NOTE Confidence: 0.86251837

00:09:13.030 --> 00:09:14.262 Ability to stay awake,

NOTE Confidence: 0.86251837

00:09:14.262 --> 00:09:16.110 and those sorts of things when

NOTE Confidence: 0.86251837

00:09:16.172 --> 00:09:17.858 you're at that 5-6 hour mark.

NOTE Confidence: 0.86251837

00:09:17.860 --> 00:09:19.390 We know that there's definitely

NOTE Confidence: 0.86251837

00:09:19.390 --> 00:09:21.180 safety issues with folks that are,

NOTE Confidence: 0.86251837

00:09:21.180 --> 00:09:22.690 you know, driving for instance,

NOTE Confidence: 0.86251837

00:09:22.690 --> 00:09:25.106 with habitually less than six hours of sleep.

NOTE Confidence: 0.86251837

00:09:25.110 --> 00:09:27.142 Those folks are almost

NOTE Confidence: 0.86251837

00:09:27.142 --> 00:09:29.174 like an impaired driver.

NOTE Confidence: 0.86251837

00:09:29.180 --> 00:09:32.069 And but you kind of see a decline in

NOTE Confidence: 0.86251837

00:09:32.069 --> 00:09:34.594 performance in that five to six hour window,

NOTE Confidence: 0.86251837

00:09:34.600 --> 00:09:37.160 which is where much of our military is.

NOTE Confidence: 0.86251837

00:09:37.160 --> 00:09:38.750 But it's not as steep.

NOTE Confidence: 0.86251837

00:09:38.750 --> 00:09:40.658 Is that less than 4 marks?

NOTE Confidence: 0.86251837

00:09:40.660 --> 00:09:42.844 So people are kind of able to

NOTE Confidence: 0.86251837

00:09:42.844 --> 00:09:44.810 muddle through with this, you know,

NOTE Confidence: 0.86251837

00:09:44.810 --> 00:09:46.730 5-6 hours of sleep a night.

NOTE Confidence: 0.86251837

00:09:46.730 --> 00:09:48.956 I would argue there's no free lunch,

NOTE Confidence: 0.86251837

00:09:48.960 --> 00:09:51.136 and so you tend to see in these

NOTE Confidence: 0.86251837

00:09:51.136 --> 00:09:52.470 these patient populations,

NOTE Confidence: 0.86251837

00:09:52.470 --> 00:09:53.424 other health problems,

NOTE Confidence: 0.86251837

00:09:53.424 --> 00:09:55.650 or they're coming to the sleep clinic

NOTE Confidence: 0.86251837

00:09:55.711 --> 00:09:57.678 because they're not able to do well

NOTE Confidence: 0.86251837

00:09:57.678 --> 00:09:59.590 with this anymore or professionalism.

NOTE Confidence: 0.86251837

00:09:59.590 --> 00:09:59.912 Issues.

NOTE Confidence: 0.86251837

00:09:59.912 --> 00:10:00.234 Work,

NOTE Confidence: 0.86251837

00:10:00.234 --> 00:10:02.488 and so a number of you know

NOTE Confidence: 0.86251837

00:10:02.488 --> 00:10:04.787 issues may be issues with their

NOTE Confidence: 0.86251837

00:10:04.787 --> 00:10:06.697 marriage or with their children.

NOTE Confidence: 0.86251837

00:10:06.700 --> 00:10:08.482 So quality of life and and

NOTE Confidence: 0.86251837

00:10:08.482 --> 00:10:09.670 work quality issues that

NOTE Confidence: 0.8439107

00:10:09.733 --> 00:10:11.683 start to suffer with progressive

NOTE Confidence: 0.8439107

00:10:11.683 --> 00:10:13.633 sleep deprivation in the military.

NOTE Confidence: 0.8439107

00:10:13.640 --> 00:10:15.824 Since the combat operations in the

NOTE Confidence: 0.8439107

00:10:15.824 --> 00:10:18.500 Middle East sort of took off in 2001,

NOTE Confidence: 0.8439107

00:10:18.500 --> 00:10:20.175 we've added progressive steep rise

NOTE Confidence: 0.8439107

00:10:20.175 --> 00:10:22.241 and insomnia sleep apnea and really

NOTE Confidence: 0.8439107

00:10:22.241 --> 00:10:23.916 all sleep disorders across the

NOTE Confidence: 0.8439107

00:10:23.916 --> 00:10:25.790 different branches of the military.

NOTE Confidence: 0.8353252

00:10:28.430 --> 00:10:31.292 And so I had said a little bit earlier.

NOTE Confidence: 0.8353252

00:10:31.300 --> 00:10:33.526 I was interested in this author Alan

NOTE Confidence: 0.8353252

00:10:33.526 --> 00:10:35.842 Derickson, and he had published an article

NOTE Confidence: 0.8353252

00:10:35.842 --> 00:10:38.318 called no Such Thing as a Night Sleep.

NOTE Confidence: 0.8353252

00:10:38.320 --> 00:10:40.280 That sort of looked looked at the

NOTE Confidence: 0.8353252

00:10:40.280 --> 00:10:42.247 origins of sleep deprivation in this

NOTE Confidence: 0.8353252

00:10:42.247 --> 00:10:44.377 culture of sleepless in the military,

NOTE Confidence: 0.8353252

00:10:44.380 --> 00:10:46.288 going back to World War Two.

NOTE Confidence: 0.8353252

00:10:46.290 --> 00:10:48.257 And when we think about some changes

NOTE Confidence: 0.8353252

00:10:48.257 --> 00:10:50.120 that happened in combat operations.

NOTE Confidence: 0.8353252

00:10:50.120 --> 00:10:52.028 If we think about the blitzkrieg

NOTE Confidence: 0.8353252

00:10:52.028 --> 00:10:53.941 in in Europe, that the German,

NOTE Confidence: 0.8353252

00:10:53.941 --> 00:10:56.500 the German army rolled into Poland very fast,

NOTE Confidence: 0.8353252

00:10:56.500 --> 00:10:58.540 you know less than 72 hours.

NOTE Confidence: 0.8353252

00:10:58.540 --> 00:10:59.388 They covered,

NOTE Confidence: 0.8353252

00:10:59.388 --> 00:11:01.932 they covered an amount of ground

NOTE Confidence: 0.8353252

00:11:01.932 --> 00:11:04.319 that wasn't previously possible.

NOTE Confidence: 0.8353252

00:11:04.320 --> 00:11:06.792 And it was such a fast paced assault

NOTE Confidence: 0.8353252

00:11:06.792 --> 00:11:09.423 that it took Poland by surprise and it

NOTE Confidence: 0.8353252

00:11:09.423 --> 00:11:12.363 was just a very quick take over and

NOTE Confidence: 0.8353252

00:11:12.363 --> 00:11:14.721 later people realize that the German

NOTE Confidence: 0.8353252

00:11:14.730 --> 00:11:16.806 army was amped up on methamphetamine,

NOTE Confidence: 0.8353252

00:11:16.810 --> 00:11:18.054 were known as providing,

NOTE Confidence: 0.8353252

00:11:18.054 --> 00:11:21.128 which had been kind of was used in the

NOTE Confidence: 0.8353252

00:11:21.128 --> 00:11:23.408 military and also throughout German society.

NOTE Confidence: 0.8353252

00:11:23.410 --> 00:11:25.706 There's a little bit of debate about

NOTE Confidence: 0.8353252

00:11:25.706 --> 00:11:27.918 to what extent this was utilized,

NOTE Confidence: 0.8353252

00:11:27.920 --> 00:11:29.072 but there's been.

NOTE Confidence: 0.8353252

00:11:29.072 --> 00:11:31.376 It's been kind of widely documented

NOTE Confidence: 0.8353252

00:11:31.376 --> 00:11:33.896 that heavy use of stimulants to help

NOTE Confidence: 0.8353252

00:11:33.896 --> 00:11:36.540 kind of further 24/7 combat operations.

NOTE Confidence: 0.8353252

00:11:36.540 --> 00:11:38.946 The Japanese in their kamikaze pilots

NOTE Confidence: 0.8353252

00:11:38.946 --> 00:11:40.948 would use cocaine suppositories with

NOTE Confidence: 0.8353252

00:11:40.948 --> 00:11:42.970 haggis are actually mentioned in this

NOTE Confidence: 0.8353252

00:11:42.970 --> 00:11:45.028 article as well as drinking saki.

NOTE Confidence: 0.8353252

00:11:45.030 --> 00:11:47.974 So for some of these for kamikaze pilots,

NOTE Confidence: 0.8353252

00:11:47.980 --> 00:11:48.850 for instance,

NOTE Confidence: 0.8353252

00:11:48.850 --> 00:11:52.330 the idea of drugs and alcohol to enable

NOTE Confidence: 0.8353252

00:11:52.420 --> 00:11:55.308 them to get into a state where they

NOTE Confidence: 0.8353252

00:11:55.308 --> 00:11:58.340 could go forward with their mission.

NOTE Confidence: 0.8353252

00:11:58.340 --> 00:12:00.887 So a lot of fear and terror in this

NOTE Confidence: 0.8353252

00:12:00.887 --> 00:12:03.073 population in relation to kind of these

NOTE Confidence: 0.8353252

00:12:03.073 --> 00:12:05.599 issues and the United States and Great

NOTE Confidence: 0.8353252

00:12:05.599 --> 00:12:08.059 Britain used amphetamines for their pilots.

NOTE Confidence: 0.8353252

00:12:08.060 --> 00:12:10.070 And we saw that, you know,

NOTE Confidence: 0.8353252

00:12:10.070 --> 00:12:12.446 with the attack on Pearl Harbor was early

NOTE Confidence: 0.8353252

00:12:12.446 --> 00:12:15.087 in the morning before folks were awake,

NOTE Confidence: 0.8353252

00:12:15.090 --> 00:12:17.176 or just as they're getting started with

NOTE Confidence: 0.8353252

00:12:17.176 --> 00:12:19.241 their day and the devastating effects

NOTE Confidence: 0.8353252

00:12:19.241 --> 00:12:21.455 had so people realize they combats.

NOTE Confidence: 0.8353252

00:12:21.460 --> 00:12:23.135 There's there's no like good

NOTE Confidence: 0.8353252

00:12:23.135 --> 00:12:24.140 manners in combat.

NOTE Confidence: 0.8353252

00:12:24.140 --> 00:12:25.480 It's a 24/7 operation.

NOTE Confidence: 0.8353252

00:12:25.480 --> 00:12:27.490 This was probably always the case,

NOTE Confidence: 0.8353252

00:12:27.490 --> 00:12:29.992 but it kind of became a

NOTE Confidence: 0.8353252

00:12:29.992 --> 00:12:31.243 little more pronounced.

NOTE Confidence: 0.8353252

00:12:31.250 --> 00:12:33.428 In World War Two and the Soviet Union and

NOTE Confidence: 0.8353252

00:12:33.428 --> 00:12:36.022 the United States and some other countries

NOTE Confidence: 0.8353252

00:12:36.022 --> 00:12:38.023 started publishing field manuals for

NOTE Confidence: 0.8353252

00:12:38.023 --> 00:12:40.088 their military about nighttime operations,

NOTE Confidence: 0.8353252

00:12:40.090 --> 00:12:43.150 and there was a lot of fear with sleep.

NOTE Confidence: 0.8353252

00:12:43.150 --> 00:12:46.000 So if you were in the Pacific Theater and you

NOTE Confidence: 0.8353252

00:12:46.072 --> 00:12:48.928 fall asleep in trench Warfare Island hopping,

NOTE Confidence: 0.8353252

00:12:48.930 --> 00:12:50.630 you could be hacked to

NOTE Confidence: 0.8353252

00:12:50.630 --> 00:12:51.990 death by Japanese scouts,

NOTE Confidence: 0.8353252

00:12:51.990 --> 00:12:56.558 so there's a lot of fear surrounding sleep.

NOTE Confidence: 0.8353252

00:12:56.560 --> 00:12:58.588 And as a matter of fact,

NOTE Confidence: 0.8353252

00:12:58.590 --> 00:13:00.753 an Congress you know prior to even

NOTE Confidence: 0.8353252

00:13:00.753 --> 00:13:03.198 the Civil War had made falling asleep

NOTE Confidence: 0.8353252

00:13:03.198 --> 00:13:05.364 on guard duty a capital offense.

NOTE Confidence: 0.8353252

00:13:05.370 --> 00:13:08.838 So you could be publicly executed.

NOTE Confidence: 0.8353252

00:13:08.840 --> 00:13:11.204 Admitted in addition to being just

NOTE Confidence: 0.8353252

00:13:11.204 --> 00:13:13.410 disgraced for falling asleep on duty

NOTE Confidence: 0.8353252

00:13:13.410 --> 00:13:16.049 because it was a big big safety issue of

NOTE Confidence: 0.8353252

00:13:16.049 --> 00:13:18.609 that could put all your colleagues at risk.

NOTE Confidence: 0.8353252

00:13:18.610 --> 00:13:21.301 When I was deployed to Iraq in 2000 and

NOTE Confidence: 0.8353252

00:13:21.301 --> 00:13:23.629 four 2005 we had this issue transpired

NOTE Confidence: 0.8353252

00:13:23.629 --> 00:13:26.029 where we had a mortar platoon.

NOTE Confidence: 0.8353252

00:13:26.030 --> 00:13:28.004 It was 28 US service members

NOTE Confidence: 0.8353252

00:13:28.004 --> 00:13:29.320 at a small patrol

NOTE Confidence: 0.85796636

00:13:29.400 --> 00:13:32.190 base that we had set up in this town in

NOTE Confidence: 0.85796636

00:13:32.268 --> 00:13:34.977 Iraq guarded by Iraqi Army who allowed

NOTE Confidence: 0.85796636

00:13:34.977 --> 00:13:37.408 a suicide truck bomber to drive through

NOTE Confidence: 0.85796636

00:13:37.408 --> 00:13:39.980 the gate and blow up the sleeping.

NOTE Confidence: 0.85796636

00:13:39.980 --> 00:13:43.508 Orders and so we had about 10 casualties in

NOTE Confidence: 0.85796636

00:13:43.508 --> 00:13:47.234 the deaths in addition to a lot of wounded.

NOTE Confidence: 0.85796636

00:13:47.240 --> 00:13:48.760 So this is, you know,

NOTE Confidence: 0.85796636

00:13:48.760 --> 00:13:50.976 this notion of using sleep as a weapon

NOTE Confidence: 0.85796636

00:13:50.976 --> 00:13:52.890 an recognizing that people are vulnerable

NOTE Confidence: 0.85796636

00:13:52.890 --> 00:13:54.840 when they're asleep is widely used.

NOTE Confidence: 0.85796636

00:13:54.840 --> 00:13:57.136 If I go back to this and these

NOTE Confidence: 0.85796636

00:13:57.136 --> 00:13:58.790 two books on the bottom,

NOTE Confidence: 0.85796636

00:13:58.790 --> 00:14:01.156 the greatest generation and never was so

NOTE Confidence: 0.85796636

00:14:01.156 --> 00:14:03.959 much owed by so many to so few you know,

NOTE Confidence: 0.85796636

00:14:03.960 --> 00:14:06.016 we get the idea that in the military

NOTE Confidence: 0.85796636

00:14:06.016 --> 00:14:08.108 sleeps a weakness folks were able to

NOTE Confidence: 0.85796636

00:14:08.108 --> 00:14:10.047 kind of pound through and succeed

NOTE Confidence: 0.85796636

00:14:10.047 --> 00:14:11.857 in spite of sleep deprivation,

NOTE Confidence: 0.85796636

00:14:11.860 --> 00:14:13.988 and in spite of fatigue they could.

NOTE Confidence: 0.85796636

00:14:13.990 --> 00:14:15.946 They could get through with a

NOTE Confidence: 0.85796636

00:14:15.946 --> 00:14:17.250 strong Cup of coffee.

NOTE Confidence: 0.85796636

00:14:17.250 --> 00:14:18.750 And then use of tobacco,

NOTE Confidence: 0.85796636

00:14:18.750 --> 00:14:20.634 other stimulants and make it an

NOTE Confidence: 0.85796636

00:14:20.634 --> 00:14:22.477 that succeeding in combat in spite

NOTE Confidence: 0.85796636

00:14:22.477 --> 00:14:24.325 of sleep deprivation or in spite of

NOTE Confidence: 0.85796636

00:14:24.325 --> 00:14:26.246 the cold in the European theater,

NOTE Confidence: 0.85796636

00:14:26.250 --> 00:14:28.350 was a sign of strength and manliness.

NOTE Confidence: 0.85796636

00:14:28.350 --> 00:14:30.150 And then these folks came home,

NOTE Confidence: 0.85796636

00:14:30.150 --> 00:14:31.950 and they were known as the

NOTE Confidence: 0.85796636

00:14:31.950 --> 00:14:32.550 greatest generation.

NOTE Confidence: 0.85796636

00:14:32.550 --> 00:14:34.350 These are folks that were strong,

NOTE Confidence: 0.85796636

00:14:34.350 --> 00:14:38.150 they could kind of get through any situation.

NOTE Confidence: 0.85796636

00:14:38.150 --> 00:14:40.358 And it sort of basically kind of carries

NOTE Confidence: 0.85796636

00:14:40.358 --> 00:14:42.417 forth this mythology that you don't

NOTE Confidence: 0.85796636

00:14:42.417 --> 00:14:44.222 need sleep to function effectively,

NOTE Confidence: 0.85796636

00:14:44.230 --> 00:14:46.470 and that that sleep is a weakness,

NOTE Confidence: 0.85796636

00:14:46.470 --> 00:14:48.702 and this is a an idea that kind

NOTE Confidence: 0.85796636

00:14:48.702 --> 00:14:50.309 of comes up repeatedly.

NOTE Confidence: 0.85796636

00:14:50.310 --> 00:14:53.662 There's a whole series of cartoons and just

NOTE Confidence: 0.85796636

00:14:53.662 --> 00:14:56.936 blanking at the moment on the authors name.

NOTE Confidence: 0.85796636

00:14:56.940 --> 00:14:59.028 Depicting kind of the sleepy GI,

NOTE Confidence: 0.85796636

00:14:59.030 --> 00:15:01.501 you know the baggy eyes and and

NOTE Confidence: 0.85796636

00:15:01.501 --> 00:15:03.304 sleep deprived soldier in World

NOTE Confidence: 0.85796636

00:15:03.304 --> 00:15:05.314 War Two and equating sleep with,

NOTE Confidence: 0.85796636

00:15:05.320 --> 00:15:07.414 you know, a fatal outcome being

NOTE Confidence: 0.85796636

00:15:07.414 --> 00:15:08.810 neglectful or being irresponsible.

NOTE Confidence: 0.85796636

00:15:08.810 --> 00:15:10.186 So over and over,

NOTE Confidence: 0.85796636

00:15:10.186 --> 00:15:11.906 there's almost this morally Laden

NOTE Confidence: 0.85796636

00:15:11.906 --> 00:15:13.690 messaging of sleeping, a weakness.

NOTE Confidence: 0.85796636

00:15:13.690 --> 00:15:16.140 And now in our Military United States,

NOTE Confidence: 0.85796636

00:15:16.140 --> 00:15:18.317 another kind of 1st World Nations have

NOTE Confidence: 0.85796636

00:15:18.317 --> 00:15:20.670 the advantage of night vision technology,

NOTE Confidence: 0.85796636

00:15:20.670 --> 00:15:22.764 so it's in the current conflicts

NOTE Confidence: 0.85796636

00:15:22.764 --> 00:15:24.160 in the Middle East.

NOTE Confidence: 0.85796636

00:15:24.160 --> 00:15:27.088 It's really the first time where you have

NOTE Confidence: 0.85796636

00:15:27.088 --> 00:15:29.848 widespread use of night vision technology to.

NOTE Confidence: 0.85796636

00:15:29.850 --> 00:15:30.464 You know,

NOTE Confidence: 0.85796636

00:15:30.464 --> 00:15:31.692 especially in this special

NOTE Confidence: 0.85796636

00:15:31.692 --> 00:15:32.306 operations community,

NOTE Confidence: 0.85796636

00:15:32.310 --> 00:15:34.194 to capture and kill high value

NOTE Confidence: 0.85796636

00:15:34.194 --> 00:15:35.989 targets by sneaking up on them.

NOTE Confidence: 0.85796636

00:15:35.990 --> 00:15:37.978 You know when they're asleep and for

NOTE Confidence: 0.85796636

00:15:37.978 --> 00:15:40.578 folks in the special operations community.

NOTE Confidence: 0.85796636

00:15:40.580 --> 00:15:41.507 When they deploy,

NOTE Confidence: 0.85796636

00:15:41.507 --> 00:15:43.361 many will deploy for several months

NOTE Confidence: 0.85796636

00:15:43.361 --> 00:15:45.659 at a time where they're completely

NOTE Confidence: 0.85796636

00:15:45.659 --> 00:15:47.203 shifted to nighttime operation,

NOTE Confidence: 0.85796636

00:15:47.210 --> 00:15:48.890 so everything is happening at

NOTE Confidence: 0.85796636

00:15:48.890 --> 00:15:51.360 night and they get what they what

NOTE Confidence: 0.85796636

00:15:51.360 --> 00:15:52.800 they call reverse cycle.

NOTE Confidence: 0.85796636

00:15:52.800 --> 00:15:54.405 So you're basically training someone

NOTE Confidence: 0.85796636

00:15:54.405 --> 00:15:56.824 to be in an incredibly intense high

NOTE Confidence: 0.85796636

00:15:56.824 --> 00:15:58.724 adrenaline situations at night time,

NOTE Confidence: 0.85796636

00:15:58.730 --> 00:15:59.813 life or death,

NOTE Confidence: 0.85796636

00:15:59.813 --> 00:16:01.979 you know fight or flight situations

NOTE Confidence: 0.85796636

00:16:01.979 --> 00:16:04.658 every night for months and months on end.

NOTE Confidence: 0.85796636

00:16:04.660 --> 00:16:05.782 And not surprisingly,

NOTE Confidence: 0.85796636

00:16:05.782 --> 00:16:08.026 these folks have trouble when they

NOTE Confidence: 0.85796636

00:16:08.026 --> 00:16:10.822 come back home and back to their family

NOTE Confidence: 0.85796636

00:16:10.822 --> 00:16:12.880 independence and are trying to sleep.

NOTE Confidence: 0.85796636

00:16:12.880 --> 00:16:16.674 Normal hours in bed with their wife.

NOTE Confidence: 0.85796636

00:16:16.680 --> 00:16:18.370 In the military we were.

NOTE Confidence: 0.85796636

00:16:18.370 --> 00:16:20.440 We've been trying to look at

NOTE Confidence: 0.85796636

00:16:20.440 --> 00:16:21.820 what's the operational relevance

NOTE Confidence: 0.84442633

00:16:21.881 --> 00:16:24.425 of sleep disorders on our active duty forces.

NOTE Confidence: 0.84442633

00:16:24.430 --> 00:16:26.789 If we just look at in our

NOTE Confidence: 0.84442633

00:16:26.789 --> 00:16:27.800 electronic medical record,

NOTE Confidence: 0.84442633

00:16:27.800 --> 00:16:29.858 how many of the roughly 500,000

NOTE Confidence: 0.84442633

00:16:29.858 --> 00:16:31.620 service members in the Army

NOTE Confidence: 0.84442633

00:16:31.620 --> 00:16:33.528 active duty folks in the army,

NOTE Confidence: 0.84442633

00:16:33.530 --> 00:16:35.192 how many of these 500 soldiers

NOTE Confidence: 0.84442633

00:16:35.192 --> 00:16:36.800 have a sleep disorder documented

NOTE Confidence: 0.84442633

00:16:36.800 --> 00:16:38.588 or asleep complaint documented?

NOTE Confidence: 0.84442633

00:16:38.590 --> 00:16:41.278 This doesn't necessarily mean we have a PSTN.

NOTE Confidence: 0.84442633

00:16:41.280 --> 00:16:43.296 All these folks are perfect diagnosis,

NOTE Confidence: 0.84442633

00:16:43.300 --> 00:16:45.328 but where a diagnosis of snoring,

NOTE Confidence: 0.84442633

00:16:45.330 --> 00:16:47.070 daytime sleepiness, shift work disorder.

NOTE Confidence: 0.84442633

00:16:47.070 --> 00:16:49.569 Insomnia and so on and so forth.

NOTE Confidence: 0.84442633

00:16:49.570 --> 00:16:51.691 Half of them were saying and that

NOTE Confidence: 0.84442633

00:16:51.691 --> 00:16:54.120 half of our soldiers have have gone

NOTE Confidence: 0.84442633

00:16:54.120 --> 00:16:56.763 to their doctor with some sort of

NOTE Confidence: 0.84442633

00:16:56.763 --> 00:16:58.713 asleep complaint and around 10,000

NOTE Confidence: 0.84442633

00:16:58.713 --> 00:17:01.194 that are actually on a profile,

NOTE Confidence: 0.84442633

00:17:01.194 --> 00:17:03.936 meaning duty restrictions that limit their

NOTE Confidence: 0.84442633

00:17:03.936 --> 00:17:06.959 ability to deploy or to be stationed

NOTE Confidence: 0.84442633

00:17:06.959 --> 00:17:09.710 overseas because of their sleep disorder.

NOTE Confidence: 0.84442633

00:17:09.710 --> 00:17:12.070 In 2018 these were on the top 20

NOTE Confidence: 0.84442633

00:17:12.070 --> 00:17:14.070 list of medications prescribed in

NOTE Confidence: 0.84442633

00:17:14.070 --> 00:17:17.171 the military in terms of costs and

NOTE Confidence: 0.84442633

00:17:17.250 --> 00:17:19.686 what's being paid out by Tricare.

NOTE Confidence: 0.84442633

00:17:19.690 --> 00:17:23.146 So a lot of ambient and trazadone so clearly

NOTE Confidence: 0.84442633

00:17:23.146 --> 00:17:26.219 sleep is a huge issue in our population.

NOTE Confidence: 0.84442633

00:17:26.220 --> 00:17:27.924 Unfortunately not enough sleep

NOTE Confidence: 0.84442633

00:17:27.924 --> 00:17:30.054 centers within the military health

NOTE Confidence: 0.84442633

00:17:30.054 --> 00:17:32.367 care system to see all these folks.

NOTE Confidence: 0.8453183

00:17:35.460 --> 00:17:39.030 I'm not sure that red line came out with C.

NOTE Confidence: 0.8453183

00:17:39.030 --> 00:17:40.606 Ever Red Lion on my screen and I

NOTE Confidence: 0.8453183

00:17:40.606 --> 00:17:43.880 don't know how it got there, but.

NOTE Confidence: 0.8453183

00:17:43.880 --> 00:17:46.550 Interesting anyway.

NOTE Confidence: 0.8453183

00:17:46.550 --> 00:17:48.566 This is sort of top 10.

NOTE Confidence: 0.8453183

00:17:48.570 --> 00:17:50.280 This is a graph showing the

NOTE Confidence: 0.8453183

00:17:50.280 --> 00:17:52.286 top 20 causes of reasons why

NOTE Confidence: 0.8453183

00:17:52.286 --> 00:17:54.276 folks are non deployable sleep.

NOTE Confidence: 0.8453183

00:17:54.280 --> 00:17:56.290 A sleep disorder is number 10.

NOTE Confidence: 0.8453183

00:17:56.290 --> 00:17:58.396 These are usually folks with so

NOTE Confidence: 0.8453183

00:17:58.396 --> 00:18:00.527 anybody that is requiring use of

NOTE Confidence: 0.8453183

00:18:00.527 --> 00:18:02.187 a sedative hypnotics like Ambien

NOTE Confidence: 0.8453183

00:18:02.187 --> 00:18:04.359 or Lunesta for more than 30 days,

NOTE Confidence: 0.8453183

00:18:04.360 --> 00:18:06.154 or a stimulant like PROVIGIL for

NOTE Confidence: 0.8453183

00:18:06.154 --> 00:18:08.512 more than 30 days where it's a

NOTE Confidence: 0.8453183

00:18:08.512 --> 00:18:09.972 habitual something that using

NOTE Confidence: 0.8453183

00:18:09.972 --> 00:18:11.791 habitually or they have moderate

NOTE Confidence: 0.8453183

00:18:11.791 --> 00:18:13.765 or severe sleep apnea on CPAP,

NOTE Confidence: 0.8453183

00:18:13.770 --> 00:18:15.510 they actually get a profile

NOTE Confidence: 0.8453183

00:18:15.510 --> 00:18:16.554 with duty limitations.

NOTE Confidence: 0.8453183

00:18:16.560 --> 00:18:18.250 And they can affect the

NOTE Confidence: 0.8453183

00:18:18.250 --> 00:18:19.602 playability and even affect

NOTE Confidence: 0.8453183

00:18:19.602 --> 00:18:21.489 their retention in the service.

NOTE Confidence: 0.84396064

00:18:24.210 --> 00:18:26.847 So an who suffers so probably the folks in

NOTE Confidence: 0.84396064

00:18:26.847 --> 00:18:29.745 our population that have kind of the greatest

NOTE Confidence: 0.84396064

00:18:29.745 --> 00:18:32.459 amount of where this is having the most

NOTE Confidence: 0.84396064

00:18:32.459 --> 00:18:34.674 impact are kind of senior level leaders.

NOTE Confidence: 0.84396064

00:18:34.674 --> 00:18:37.616 So in the military it's a younger cohort, and

NOTE Confidence: 0.84396064

00:18:37.616 --> 00:18:40.224 when you're looking at folks in their 40s,

NOTE Confidence: 0.84396064

00:18:40.230 --> 00:18:42.519 that's that's your sort of senior leadership.

NOTE Confidence: 0.84396064

00:18:42.520 --> 00:18:44.476 So senior enlisted senior officer ranks.

NOTE Confidence: 0.84396064

00:18:44.480 --> 00:18:47.423 I'm in my 40s and I'm a kernel and,

NOTE Confidence: 0.84396064

00:18:47.430 --> 00:18:50.112 you know, be retiring out of

NOTE Confidence: 0.84396064

00:18:50.112 --> 00:18:52.710 the military before I turn 50.

NOTE Confidence: 0.84396064

00:18:52.710 --> 00:18:55.350 And so sort of a younger population overall,

NOTE Confidence: 0.84396064

00:18:55.350 --> 00:18:58.158 but this is the group where you start

NOTE Confidence: 0.84396064

00:18:58.158 --> 00:19:00.918 to see them really being challenged

NOTE Confidence: 0.84396064

00:19:00.918 --> 00:19:03.882 by the impact of sleep disorders.

NOTE Confidence: 0.84396064

00:19:03.890 --> 00:19:05.864 And sort of, what sorts of factors

NOTE Confidence: 0.84396064

00:19:05.864 --> 00:19:08.305 play a role in sleep disorders in the

NOTE Confidence: 0.84396064

00:19:08.305 --> 00:19:10.579 military an you know one is chronic,

NOTE Confidence: 0.84396064

00:19:10.580 --> 00:19:11.398 insufficient sleep.

NOTE Confidence: 0.84396064

00:19:11.398 --> 00:19:14.261 We've talked about how most of the

NOTE Confidence: 0.84396064

00:19:14.261 --> 00:19:16.560 military is not getting enough sleep.

NOTE Confidence: 0.84396064

00:19:16.560 --> 00:19:18.520 A lot of shift work that's utilized

NOTE Confidence: 0.84396064

00:19:18.520 --> 00:19:19.930 in the intelligence community,

NOTE Confidence: 0.84396064

00:19:19.930 --> 00:19:21.760 for instance at Fort Fort Meade,

NOTE Confidence: 0.84396064

00:19:21.760 --> 00:19:23.860 Maryland, where the.

NOTE Confidence: 0.84396064

00:19:23.860 --> 00:19:24.848 The NSA is located.

NOTE Confidence: 0.84396064

00:19:24.848 --> 00:19:26.721 There's a lot of shift work and

NOTE Confidence: 0.84396064

00:19:26.721 --> 00:19:28.049 kind of monitoring intelligence

NOTE Confidence: 0.84396064

00:19:28.049 --> 00:19:30.113 feeds where folks are doing shift

NOTE Confidence: 0.84396064

00:19:30.113 --> 00:19:31.868 work with mixed cycles throughout.

NOTE Confidence: 0.84396064

00:19:31.870 --> 00:19:32.722 The re can.

NOTE Confidence: 0.84396064

00:19:32.722 --> 00:19:33.858 Oftentimes these are younger

NOTE Confidence: 0.84396064

00:19:33.858 --> 00:19:35.759 kind of junior personnel that are

NOTE Confidence: 0.84396064

00:19:35.759 --> 00:19:37.409 involved in very important work,

NOTE Confidence: 0.84396064

00:19:37.410 --> 00:19:39.264 but they're doing all sorts of

NOTE Confidence: 0.84396064

00:19:39.264 --> 00:19:40.800 different shifts throughout the week.

NOTE Confidence: 0.84396064

00:19:40.800 --> 00:19:42.956 You know they may have night shifts,

NOTE Confidence: 0.84396064

00:19:42.960 --> 00:19:44.500 day shifts and swing shifts,

NOTE Confidence: 0.84396064

00:19:44.500 --> 00:19:47.580 and a day off you know all in one week,

NOTE Confidence: 0.84396064

00:19:47.580 --> 00:19:49.636 rather than you know more of what we

NOTE Confidence: 0.84396064

00:19:49.636 --> 00:19:51.620 would all recommend in Sleep Medicine

NOTE Confidence: 0.84396064

00:19:51.620 --> 00:19:53.732 of usually several weeks to months.

NOTE Confidence: 0.84396064

00:19:53.740 --> 00:19:56.064 Kind of on the same shift pattern

NOTE Confidence: 0.84396064

00:19:56.064 --> 00:19:57.060 with the gradual.

NOTE Confidence: 0.84396064

00:19:57.060 --> 00:20:00.468 Transition is as you change it.

NOTE Confidence: 0.84396064

00:20:00.470 --> 00:20:02.020 For sleep environments on deployment,

NOTE Confidence: 0.84396064

00:20:02.020 --> 00:20:03.484 so you'll have infantrymen on a

NOTE Confidence: 0.84396064

00:20:03.484 --> 00:20:05.201 base in Iraq or Afghanistan where

NOTE Confidence: 0.84396064

00:20:05.201 --> 00:20:06.916 they're oftentimes sleeping in a

NOTE Confidence: 0.84396064

00:20:06.916 --> 00:20:08.681 like a shipping container that's

NOTE Confidence: 0.84396064

00:20:08.681 --> 00:20:10.386 been divided up with plywood,

NOTE Confidence: 0.84396064

00:20:10.390 --> 00:20:11.940 so that four different people

NOTE Confidence: 0.84396064

00:20:11.940 --> 00:20:13.180 can share the space.

NOTE Confidence: 0.84396064

00:20:13.180 --> 00:20:14.836 Usually the only thing good about

NOTE Confidence: 0.84396064

00:20:14.836 --> 00:20:16.899 it is high powered air conditioning,

NOTE Confidence: 0.84396064

00:20:16.900 --> 00:20:18.652 but otherwise you'll have service members

NOTE Confidence: 0.84396064

00:20:18.652 --> 00:20:20.620 that are on different shift schedules,

NOTE Confidence: 0.84396064

00:20:20.620 --> 00:20:22.892 so you may have two folks that are

NOTE Confidence: 0.84396064

00:20:22.892 --> 00:20:25.511 trying to sleep during the day while you

NOTE Confidence: 0.84396064

00:20:25.511 --> 00:20:28.059 know other folks are coming in and out,

NOTE Confidence: 0.84396064

00:20:28.060 --> 00:20:30.412 and so just a very bad sleep

NOTE Confidence: 0.84396064

00:20:30.412 --> 00:20:31.680 environment in addition to.

NOTE Confidence: 0.84396064

00:20:31.680 --> 00:20:31.940 Kennedy,

NOTE Confidence: 0.84396064

00:20:31.940 --> 00:20:33.500 other things that come up in

NOTE Confidence: 0.84396064

00:20:33.500 --> 00:20:34.280 a combat environment.

NOTE Confidence: 0.84396064

00:20:34.280 --> 00:20:36.135 You know if there's mortar or combat

NOTE Confidence: 0.84396064

00:20:36.135 --> 00:20:37.399 operations or things that are,

NOTE Confidence: 0.84396064

00:20:37.400 --> 00:20:39.674 you know where there's safety issues

NOTE Confidence: 0.84396064

00:20:39.674 --> 00:20:42.422 and people may have to wake up from

NOTE Confidence: 0.84396064

00:20:42.422 --> 00:20:44.980 sleep and put on their gear and things.

NOTE Confidence: 0.84396064

00:20:44.980 --> 00:20:46.484 And then operational contributors,

NOTE Confidence: 0.84396064

00:20:46.484 --> 00:20:47.988 constant threat of harm,

NOTE Confidence: 0.84396064

00:20:47.990 --> 00:20:48.740 unpredictable operations,

NOTE Confidence: 0.84396064

00:20:48.740 --> 00:20:50.240 tempo, long duty days.

NOTE Confidence: 0.84396064

00:20:50.240 --> 00:20:53.336 It's just sort of taken for granted in

NOTE Confidence: 0.84396064

00:20:53.336 --> 00:20:55.891 the military that people will kind of

NOTE Confidence: 0.84396064

00:20:55.891 --> 00:20:58.888 do more with less is a common mantra,

NOTE Confidence: 0.84396064

00:20:58.890 --> 00:20:59.994 and you know,

NOTE Confidence: 0.84396064

00:20:59.994 --> 00:21:03.030 for many of our leaders working you know,

NOTE Confidence: 0.84396064

00:21:03.030 --> 00:21:04.836 16 hour days becomes the norm

NOTE Confidence: 0.84396064

00:21:04.836 --> 00:21:07.396 and there's a lot of issues with

NOTE Confidence: 0.84396064

00:21:07.396 --> 00:21:09.112 family separation which creates

NOTE Confidence: 0.84396064

00:21:09.112 --> 00:21:10.920 emotional trauma and stress.

NOTE Confidence: 0.84396064

00:21:10.920 --> 00:21:11.702 Chronic anxiety,

NOTE Confidence: 0.84396064

00:21:11.702 --> 00:21:14.439 alot of issues with alcohol and tobacco.

NOTE Confidence: 0.8191063

00:21:14.440 --> 00:21:16.652 Use heavy use of caffeine and energy

NOTE Confidence: 0.8191063

00:21:16.652 --> 00:21:18.464 drinks and other supplements throughout

NOTE Confidence: 0.8191063

00:21:18.464 --> 00:21:20.876 all age groups in the military,

NOTE Confidence: 0.8191063

00:21:20.880 --> 00:21:22.944 and then folks that suffer from

NOTE Confidence: 0.8191063

00:21:22.944 --> 00:21:24.820 PTSD and traumatic brain injury.

NOTE Confidence: 0.8191063

00:21:24.820 --> 00:21:26.968 And in the case of TBI,

NOTE Confidence: 0.8191063

00:21:26.970 --> 00:21:29.140 most of what you see in the

NOTE Confidence: 0.8191063

00:21:29.140 --> 00:21:31.270 military is mild TBI concussions.

NOTE Confidence: 0.8191063

00:21:31.270 --> 00:21:33.055 More analogous to what you'd

NOTE Confidence: 0.8191063

00:21:33.055 --> 00:21:34.483 see in sports injuries.

NOTE Confidence: 0.8191063

00:21:34.490 --> 00:21:36.835 And oftentimes folks that have been in

NOTE Confidence: 0.8191063

00:21:36.835 --> 00:21:39.140 proximity to blast trauma on deployment.

NOTE Confidence: 0.8345722

00:21:41.670 --> 00:21:43.903 If you think about sort of the

NOTE Confidence: 0.8345722

00:21:43.903 --> 00:21:45.530 Speelman model of insomnia,

NOTE Confidence: 0.8345722

00:21:45.530 --> 00:21:48.374 or that 3P model of sort of factors that

NOTE Confidence: 0.8345722

00:21:48.374 --> 00:21:51.149 lead to the development of of insomnia,

NOTE Confidence: 0.8345722

00:21:51.150 --> 00:21:52.570 kind of a predisposition,

NOTE Confidence: 0.8345722

00:21:52.570 --> 00:21:55.102 some sort of a precipitating event and

NOTE Confidence: 0.8345722

00:21:55.102 --> 00:21:57.124 then factors that perpetuate the insomnia

NOTE Confidence: 0.8345722

00:21:57.124 --> 00:21:59.917 cause it to turn into this chronic issue,

NOTE Confidence: 0.8345722

00:21:59.920 --> 00:22:02.328 we can sort of replicate this model

NOTE Confidence: 0.8345722

00:22:02.328 --> 00:22:05.215 in the military where we have a a

NOTE Confidence: 0.8345722

00:22:05.215 --> 00:22:07.000 population that's younger and tends

NOTE Confidence: 0.8345722

00:22:07.075 --> 00:22:09.771 to be a little bit more phase delayed

NOTE Confidence: 0.8345722

00:22:09.771 --> 00:22:11.476 with regards to circadian timing.

NOTE Confidence: 0.8345722

00:22:11.476 --> 00:22:13.186 So most most younger folks,

NOTE Confidence: 0.8345722

00:22:13.190 --> 00:22:15.108 as we all know it, would probably

NOTE Confidence: 0.8345722

00:22:15.108 --> 00:22:17.300 prefer to be staying up later at night.

NOTE Confidence: 0.8345722

00:22:17.300 --> 00:22:19.484 You know 11 or midnight or even later.

NOTE Confidence: 0.8345722

00:22:19.490 --> 00:22:21.134 And sleeping in a little later

NOTE Confidence: 0.8345722

00:22:21.134 --> 00:22:22.230 than in the morning.

NOTE Confidence: 0.8345722

00:22:22.230 --> 00:22:24.696 So a 9 to 5 schedule for most people.

NOTE Confidence: 0.8345722

00:22:24.700 --> 00:22:26.338 Most adults tends to workout OK,

NOTE Confidence: 0.8345722

00:22:26.340 --> 00:22:28.272 but in the military many folks are

NOTE Confidence: 0.8345722

00:22:28.272 --> 00:22:30.270 starting their work day, you know.

NOTE Confidence: 0.8345722

00:22:30.270 --> 00:22:33.000 Well before 6:00 in the morning.

NOTE Confidence: 0.8345722

00:22:33.000 --> 00:22:35.800 Whether it's due to long commutes or

NOTE Confidence: 0.8345722

00:22:35.800 --> 00:22:38.985 just a long training day or setting

NOTE Confidence: 0.8345722

00:22:38.985 --> 00:22:42.170 up a training environment by 7:00 AM.

NOTE Confidence: 0.8345722

00:22:42.170 --> 00:22:45.096 The day's work days in the military

NOTE Confidence: 0.8345722

00:22:45.096 --> 00:22:47.883 are slanted more towards like a 7:00

NOTE Confidence: 0.8345722

00:22:47.883 --> 00:22:50.860 AM to 4:00 PM rather than a 9 to 5.

NOTE Confidence: 0.8345722

00:22:50.860 --> 00:22:52.690 So you're taking a population that's

NOTE Confidence: 0.8345722

00:22:52.690 --> 00:22:54.821 naturally kind of has more of a

NOTE Confidence: 0.8345722

00:22:54.821 --> 00:22:56.236 phase delay tendency and forcing.

NOTE Confidence: 0.8345722

00:22:56.240 --> 00:22:58.922 You know the round peg into a square hole,

NOTE Confidence: 0.8345722

00:22:58.930 --> 00:22:59.992 so to speak.

NOTE Confidence: 0.8345722

00:22:59.992 --> 00:23:02.470 And this right off the bat can

NOTE Confidence: 0.8345722

00:23:02.553 --> 00:23:04.197 lead to issues with.

NOTE Confidence: 0.8040769

00:23:06.470 --> 00:23:10.318 With. I'm just getting a

NOTE Confidence: 0.8040769

00:23:10.318 --> 00:23:11.703 notification on here with Zoom.

NOTE Confidence: 0.8774836

00:23:14.610 --> 00:23:16.199 So this can, I'm sorry again about

NOTE Confidence: 0.8774836

00:23:16.199 --> 00:23:17.568 this red streak on the screen.

NOTE Confidence: 0.8774836

00:23:17.570 --> 00:23:19.166 I've no idea where that came from.

NOTE Confidence: 0.8774836

00:23:19.170 --> 00:23:20.994 I don't know if it's showing up on

NOTE Confidence: 0.8774836

00:23:20.994 --> 00:23:22.590 your end, but it could be worse.

NOTE Confidence: 0.8774836

00:23:22.590 --> 00:23:23.730 It could be like covering

NOTE Confidence: 0.8774836

00:23:23.730 --> 00:23:24.870 the whole screen I suppose.

NOTE Confidence: 0.8266047

00:23:27.100 --> 00:23:28.598 And I think Lauren tried to jump

NOTE Confidence: 0.8266047

00:23:28.598 --> 00:23:30.041 in to take control to maybe

NOTE Confidence: 0.8266047

00:23:30.041 --> 00:23:31.739 help me with that, but it's it.

NOTE Confidence: 0.8266047

00:23:31.739 --> 00:23:33.678 When this happens it makes me go in

NOTE Confidence: 0.8266047

00:23:33.678 --> 00:23:35.421 and change all my settings for zuman

NOTE Confidence: 0.8266047

00:23:35.421 --> 00:23:37.186 like log out of the meeting and so

NOTE Confidence: 0.8266047

00:23:37.186 --> 00:23:39.316 it may not be worth it or possible

NOTE Confidence: 0.8266047

00:23:39.316 --> 00:23:41.290 and I'm not tech savvy enough.

NOTE Confidence: 0.8266047

00:23:41.290 --> 00:23:42.330 Um hi Jacob it's

NOTE Confidence: 0.780506

00:23:42.330 --> 00:23:43.968 Lauren sorry yeah that was going

NOTE Confidence: 0.780506

00:23:43.968 --> 00:23:45.947 to try to get in to do that.

NOTE Confidence: 0.780506

00:23:45.950 --> 00:23:48.540 I think if you want to get rid of it,

NOTE Confidence: 0.780506

00:23:48.540 --> 00:23:51.010 you if you go to the very top of zoom

NOTE Confidence: 0.780506

00:23:51.079 --> 00:23:53.368 and you go to view options there's

NOTE Confidence: 0.780506

00:23:53.368 --> 00:23:55.689 a little thing that says annotate.

NOTE Confidence: 0.780506

00:23:55.690 --> 00:23:58.147 I don't know if you can see that and

NOTE Confidence: 0.780506

00:23:58.147 --> 00:24:01.760 then there's like an eraser, so undo.

NOTE Confidence: 0.780506

00:24:01.760 --> 00:24:03.495 And maybe undo or maybe just

NOTE Confidence: 0.780506

00:24:03.495 --> 00:24:05.180 hit the eraser and erase it.

NOTE Confidence: 0.780506

00:24:05.180 --> 00:24:07.460 I tried to remotely do that for you,

NOTE Confidence: 0.780506

00:24:07.460 --> 00:24:08.890 but it wouldn't let me.

NOTE Confidence: 0.780506

00:24:08.890 --> 00:24:10.310 OK got it, you got

NOTE Confidence: 0.82269466

00:24:10.310 --> 00:24:12.020 it. Bingo, you're a miracle worker.

NOTE Confidence: 0.82269466

00:24:12.020 --> 00:24:13.808 Thank you. I learned

NOTE Confidence: 0.82269466

00:24:13.808 --> 00:24:16.043 something new about Zoom now.

NOTE Confidence: 0.82269466

00:24:16.050 --> 00:24:17.401 So I think I was mentioning this

NOTE Confidence: 0.82269466

00:24:17.401 --> 00:24:19.016 idea of sort of social jetlag that

NOTE Confidence: 0.82269466

00:24:19.016 --> 00:24:20.256 you have this younger population

NOTE Confidence: 0.82269466

00:24:20.256 --> 00:24:21.738 and they kind of end up burning

NOTE Confidence: 0.82269466

00:24:21.738 --> 00:24:22.960 the candle at both ends there.

NOTE Confidence: 0.82269466

00:24:22.960 --> 00:24:24.465 Getting up very early in the morning,

NOTE Confidence: 0.82269466

00:24:24.470 --> 00:24:26.724 but it's hard for them to fall

NOTE Confidence: 0.82269466

00:24:26.724 --> 00:24:28.680 asleep until quite late at night.

NOTE Confidence: 0.82269466

00:24:28.680 --> 00:24:31.067 And so they they sort of struggle

NOTE Confidence: 0.82269466

00:24:31.067 --> 00:24:32.500 with chronic insufficient sleep.

NOTE Confidence: 0.82269466

00:24:32.500 --> 00:24:33.132 So sometimes,

NOTE Confidence: 0.82269466

00:24:33.132 --> 00:24:35.028 when these folks are coming into

NOTE Confidence: 0.82269466

00:24:35.028 --> 00:24:36.883 our clinic and they're having

NOTE Confidence: 0.82269466

00:24:36.883 --> 00:24:38.396 sleep related symptoms, no,

NOTE Confidence: 0.82269466

00:24:38.396 --> 00:24:40.126 it's not obstructive sleep apnea.

NOTE Confidence: 0.82269466

00:24:40.130 --> 00:24:41.522 These are usually young,

NOTE Confidence: 0.82269466

00:24:41.522 --> 00:24:42.908 thinner, healthier folks without

NOTE Confidence: 0.82269466

00:24:42.908 --> 00:24:44.638 a lot of risk factors.

NOTE Confidence: 0.82269466

00:24:44.640 --> 00:24:46.380 There just profoundly sleep deprived,

NOTE Confidence: 0.82269466

00:24:46.380 --> 00:24:49.836 and sometimes it's hard to reverse that we

NOTE Confidence: 0.82269466

00:24:49.836 --> 00:24:52.910 can't really change their work schedule.

NOTE Confidence: 0.82269466

00:24:52.910 --> 00:24:53.840 What also creates,

NOTE Confidence: 0.82269466

00:24:53.840 --> 00:24:54.460 you know,

NOTE Confidence: 0.82269466

00:24:54.460 --> 00:24:56.008 confusion in the in the military

NOTE Confidence: 0.82269466

00:24:56.008 --> 00:24:58.223 are kind of the premium placed on

NOTE Confidence: 0.82269466

00:24:58.223 --> 00:24:59.727 having obstructive sleep apnea,

NOTE Confidence: 0.82269466

00:24:59.730 --> 00:25:01.572 so there's actually a VA disability

NOTE Confidence: 0.82269466

00:25:01.572 --> 00:25:03.140 rating for obstructive sleep apnea,

NOTE Confidence: 0.82269466

00:25:03.140 --> 00:25:05.822 so you'll have a lot of folks coming in

NOTE Confidence: 0.82269466

00:25:05.822 --> 00:25:08.100 wanting to be tested with sleep apnea,

NOTE Confidence: 0.82269466

00:25:08.100 --> 00:25:09.924 or maybe sort of telling you

NOTE Confidence: 0.82269466

00:25:09.924 --> 00:25:12.068 what they think you want to hear

NOTE Confidence: 0.82269466

00:25:12.068 --> 00:25:13.778 in terms of symptoms so they

NOTE Confidence: 0.82269466

00:25:13.778 --> 00:25:15.850 can get tested for sleep apnea,

NOTE Confidence: 0.82269466

00:25:15.850 --> 00:25:17.726 but where maybe the big issue is

NOTE Confidence: 0.82269466

00:25:17.726 --> 00:25:19.570 insomnia or chronic insufficient sleep.

NOTE Confidence: 0.4792207

00:25:22.470 --> 00:25:22.860 See.

NOTE Confidence: 0.8928496

00:25:29.150 --> 00:25:31.670 OK, So what are the specific sleep

NOTE Confidence: 0.8928496

00:25:31.670 --> 00:25:33.959 disorders we see in the military?

NOTE Confidence: 0.84922814

00:25:36.350 --> 00:25:37.560 It said I stop sharing.

NOTE Confidence: 0.84922814

00:25:37.560 --> 00:25:39.496 I'm hopefully you guys can still see me.

NOTE Confidence: 0.84922814

00:25:39.500 --> 00:25:41.187 Let me know if not sorry that

NOTE Confidence: 0.84922814

00:25:41.190 --> 00:25:43.054 was my fault. I was trying to turn

NOTE Confidence: 0.84922814

00:25:43.054 --> 00:25:44.462 things off 'cause I didn't know

NOTE Confidence: 0.84922814

00:25:44.462 --> 00:25:46.270 if it when I took over control.

NOTE Confidence: 0.84922814

00:25:46.270 --> 00:25:47.480 If you had control you

NOTE Confidence: 0.84922814

00:25:47.480 --> 00:25:50.170 could re share your power.

NOTE Confidence: 0.84922814

00:25:50.170 --> 00:25:52.276 No, no, no is this good now.

NOTE Confidence: 0.84922814

00:25:52.276 --> 00:25:54.052 Yeah, I just wanted to make

NOTE Confidence: 0.84922814

00:25:54.052 --> 00:25:55.609 sure you're able to advance

NOTE Confidence: 0.8514693

00:25:55.610 --> 00:25:57.120 it yourself. Is that possible?

NOTE Confidence: 0.8514693

00:25:57.120 --> 00:25:59.134 So yeah, no, it's good. Thank you.

NOTE Confidence: 0.8514693

00:25:59.134 --> 00:26:01.150 OK, so if you look at sort of

NOTE Confidence: 0.8514693

00:26:01.217 --> 00:26:02.917 diagnostic coding in the military

NOTE Confidence: 0.8514693

00:26:02.917 --> 00:26:05.569 and like what we see in our clinic,

NOTE Confidence: 0.8514693

00:26:05.570 --> 00:26:07.910 so Walter Reed in our we have a 12

NOTE Confidence: 0.8514693

00:26:07.910 --> 00:26:10.097 bed sleep lab and a fellowship.

NOTE Confidence: 0.8514693

00:26:10.100 --> 00:26:11.610 We have 5 sleep physicians

NOTE Confidence: 0.8514693

00:26:11.610 --> 00:26:12.818 and one sleep asleep.

NOTE Confidence: 0.8514693

00:26:12.820 --> 00:26:13.774 Clinical psychologists were

NOTE Confidence: 0.8514693

00:26:13.774 --> 00:26:15.364 getting 700 to 1000 referrals

NOTE Confidence: 0.8514693

00:26:15.364 --> 00:26:17.048 per month for our sleep clinic.

NOTE Confidence: 0.8514693

00:26:17.050 --> 00:26:18.821 So you know over half of these

NOTE Confidence: 0.8514693

00:26:18.821 --> 00:26:20.747 folks end up getting leaked to

NOTE Confidence: 0.8514693

00:26:20.747 --> 00:26:22.587 the civilian network and seeing.

NOTE Confidence: 0.8514693

00:26:22.590 --> 00:26:24.245 Physicians on the sleep clinics

NOTE Confidence: 0.8514693

00:26:24.245 --> 00:26:26.243 on the outside 'cause we just

NOTE Confidence: 0.8514693

00:26:26.243 --> 00:26:28.210 don't have space for all of them.

NOTE Confidence: 0.8514693

00:26:28.210 --> 00:26:29.334 At our sleep center,

NOTE Confidence: 0.8514693

00:26:29.334 --> 00:26:31.463 just too much of a volume of

NOTE Confidence: 0.8514693

00:26:31.463 --> 00:26:33.348 patients and not enough providers,

NOTE Confidence: 0.8514693

00:26:33.350 --> 00:26:35.240 but the most common diagnosis that's

NOTE Confidence: 0.8514693

00:26:35.240 --> 00:26:37.156 coded in our clinic is obstructive

NOTE Confidence: 0.8514693

00:26:37.156 --> 00:26:39.242 sleep apnea and the reason for this

NOTE Confidence: 0.8514693

00:26:39.242 --> 00:26:41.623 is there is a VA disability for

NOTE Confidence: 0.8514693

00:26:41.623 --> 00:26:42.971 having obstructive sleep apnea,

NOTE Confidence: 0.8514693

00:26:42.980 --> 00:26:44.260 whereas service members separate

NOTE Confidence: 0.8514693

00:26:44.260 --> 00:26:45.220 from the military,

NOTE Confidence: 0.8514693

00:26:45.220 --> 00:26:47.668 they have to go to a whole series of

NOTE Confidence: 0.8514693

00:26:47.668 --> 00:26:49.556 events where they are given counseling

NOTE Confidence: 0.8514693

00:26:49.556 --> 00:26:51.929 on sort of how to transition out

NOTE Confidence: 0.8514693

00:26:51.929 --> 00:26:54.203 of the military to civilian life.

NOTE Confidence: 0.8514693

00:26:54.210 --> 00:26:56.128 Whether it's job fairs but a big

NOTE Confidence: 0.8514693

00:26:56.128 --> 00:26:58.523 part of that is getting making sure

NOTE Confidence: 0.8514693

00:26:58.523 --> 00:27:00.413 you have your disability ratings.

NOTE Confidence: 0.8514693

00:27:00.420 --> 00:27:02.604 That and there's a big veterans lobby,

NOTE Confidence: 0.8514693

00:27:02.610 --> 00:27:05.049 so there's a lot of emphasis put in on

NOTE Confidence: 0.8514693

00:27:05.049 --> 00:27:07.619 making sure veterans are getting their fair.

NOTE Confidence: 0.8514693

00:27:07.620 --> 00:27:10.570 Do you know rightfully so?

NOTE Confidence: 0.8514693

00:27:10.570 --> 00:27:12.664 The but the disability piece for

NOTE Confidence: 0.8514693

00:27:12.664 --> 00:27:15.200 sleep apnea is a little bit odd.

NOTE Confidence: 0.8514693

00:27:15.200 --> 00:27:17.402 There's no nothing that would really

NOTE Confidence: 0.8514693

00:27:17.402 --> 00:27:19.263 link obstructive sleep apnea to

NOTE Confidence: 0.8514693

00:27:19.263 --> 00:27:20.928 military service other than kind

NOTE Confidence: 0.8514693

00:27:20.928 --> 00:27:23.032 of a maybe questionable sort of

NOTE Confidence: 0.8514693

00:27:23.032 --> 00:27:24.456 argument related to insufficient

NOTE Confidence: 0.8514693

00:27:24.456 --> 00:27:25.880 sleep and airway tone,

NOTE Confidence: 0.8514693

00:27:25.880 --> 00:27:27.812 but it's if you have obstructive

NOTE Confidence: 0.8514693

00:27:27.812 --> 00:27:29.790 sleep apnea and daytime sleepiness,

NOTE Confidence: 0.8514693

00:27:29.790 --> 00:27:30.858 regardless of severity,

NOTE Confidence: 0.8514693

00:27:30.858 --> 00:27:32.640 it's a 30% disability rating

NOTE Confidence: 0.8514693

00:27:32.640 --> 00:27:34.415 50% if you require CPAP,

NOTE Confidence: 0.8514693

00:27:34.420 --> 00:27:37.624 and 100% if you have to get a tracheostomy,

NOTE Confidence: 0.8514693

00:27:37.630 --> 00:27:40.059 and so clearly these are these were

NOTE Confidence: 0.8514693

00:27:40.059 --> 00:27:41.620 guidelines or disability ratings.

NOTE Confidence: 0.8514693

00:27:41.620 --> 00:27:42.950 That were constructed around older

NOTE Confidence: 0.8514693

00:27:42.950 --> 00:27:44.647 ideas about sleep apnea more as

NOTE Confidence: 0.8514693

00:27:44.647 --> 00:27:46.252 a pulmonary overlap syndrome and

NOTE Confidence: 0.8514693

00:27:46.252 --> 00:27:47.536 hypoventilation or pickwickian patients.

NOTE Confidence: 0.8514693

00:27:47.540 --> 00:27:49.840 We all know how easy it is to get a

NOTE Confidence: 0.8514693

00:27:49.910 --> 00:27:52.280 diagnosis of mild sleep sleep apnea,

NOTE Confidence: 0.8514693

00:27:52.280 --> 00:27:54.656 and that's the majority of what we see

NOTE Confidence: 0.8514693

00:27:54.656 --> 00:27:57.305 in the military is a lot of mild OSA.

NOTE Confidence: 0.8514693

00:27:57.310 --> 00:27:58.790 This doesn't diminish the importance

NOTE Confidence: 0.8514693

00:27:58.790 --> 00:28:00.270 of sleep apnea in general.

NOTE Confidence: 0.8514693

00:28:00.270 --> 00:28:01.750 Could sleep apnea is quite

NOTE Confidence: 0.8514693

00:28:01.750 --> 00:28:03.230 common even in our population,

NOTE Confidence: 0.8514693

00:28:03.230 --> 00:28:05.758 but it just really makes in monies the

NOTE Confidence: 0.8514693

00:28:05.758 --> 00:28:07.669 waters 'cause it makes it hard to,

NOTE Confidence: 0.8514693

00:28:07.670 --> 00:28:08.330 you know,

NOTE Confidence: 0.8514693

00:28:08.330 --> 00:28:10.310 get a good estimate of pretest

NOTE Confidence: 0.8514693

00:28:10.310 --> 00:28:12.183 probability and know how much of

NOTE Confidence: 0.8514693

00:28:12.183 --> 00:28:13.911 a factor sleep apnea is playing.

NOTE Confidence: 0.8514693

00:28:13.920 --> 00:28:16.570 You know in your population.

NOTE Confidence: 0.8514693

00:28:16.570 --> 00:28:19.036 Insomnia is the second most likely,

NOTE Confidence: 0.8514693

00:28:19.040 --> 00:28:21.506 and this is because you know,

NOTE Confidence: 0.8514693

00:28:21.510 --> 00:28:24.530 we see circadian rhythm disorders

NOTE Confidence: 0.8514693

00:28:24.530 --> 00:28:25.738 and anxiety.

NOTE Confidence: 0.8514693

00:28:25.740 --> 00:28:27.432 And maybe even untreated OSA all

NOTE Confidence: 0.8514693

00:28:27.432 --> 00:28:29.264 kind of get lumped into insomnia

NOTE Confidence: 0.8514693

00:28:29.264 --> 00:28:30.869 or somebody is having trouble

NOTE Confidence: 0.8514693

00:28:30.869 --> 00:28:33.064 sleeping and a high you know high

NOTE Confidence: 0.8514693

00:28:33.064 --> 00:28:34.822 rate of use of sedative hypnotics.

NOTE Confidence: 0.8514693

00:28:34.830 --> 00:28:36.951 So insomnia would be kind of the

NOTE Confidence: 0.8514693

00:28:36.951 --> 00:28:38.770 second most build sort of thing,

NOTE Confidence: 0.8514693

00:28:38.770 --> 00:28:40.938 but I think if we look at what's

NOTE Confidence: 0.8514693

00:28:40.938 --> 00:28:41.480 the number

NOTE Confidence: 0.8110939

00:28:41.544 --> 00:28:43.309 one problem in the military,

NOTE Confidence: 0.8110939

00:28:43.310 --> 00:28:44.222 it's insufficient sleep,

NOTE Confidence: 0.8110939

00:28:44.222 --> 00:28:45.438 just grossly insufficient sleep.

NOTE Confidence: 0.8110939

00:28:45.440 --> 00:28:47.554 We also have a lot of parasomnias,

NOTE Confidence: 0.8110939

00:28:47.560 --> 00:28:51.536 so we do have service members with PTSD.

NOTE Confidence: 0.8110939

00:28:51.540 --> 00:28:53.645 In a number of psychoactive

NOTE Confidence: 0.8110939

00:28:53.645 --> 00:28:55.750 medications to treat their depression,

NOTE Confidence: 0.8110939

00:28:55.750 --> 00:28:57.860 PTSD and anxiety and sleep,

NOTE Confidence: 0.8110939

00:28:57.860 --> 00:29:00.737 who end up with who have nightmare

NOTE Confidence: 0.8110939

00:29:00.737 --> 00:29:03.748 disorder that is trying to be treated,

NOTE Confidence: 0.8110939

00:29:03.750 --> 00:29:06.816 chronic insomnia and kind of a

NOTE Confidence: 0.8110939

00:29:06.816 --> 00:29:08.860 variable presentation of both

NOTE Confidence: 0.8110939

00:29:08.952 --> 00:29:11.337 non REM and REM parasomnias.

NOTE Confidence: 0.8110939

00:29:11.340 --> 00:29:12.845 Especially kind of issues with

NOTE Confidence: 0.8110939

00:29:12.845 --> 00:29:14.049 combative behaviors in bed,

NOTE Confidence: 0.8110939

00:29:14.050 --> 00:29:16.210 which can be a big problem in a

NOTE Confidence: 0.8110939

00:29:16.210 --> 00:29:18.164 marriage and a big problem in a

NOTE Confidence: 0.8110939

00:29:18.164 --> 00:29:20.279 population where we see a high rate

NOTE Confidence: 0.8110939

00:29:20.279 --> 00:29:22.379 of service members and veterans that

NOTE Confidence: 0.8110939

00:29:22.379 --> 00:29:24.120 sleep with weapons in the bedroom.

NOTE Confidence: 0.8110939

00:29:24.120 --> 00:29:26.347 So I think this is a you'll be

NOTE Confidence: 0.8110939

00:29:26.347 --> 00:29:28.454 surprised when you meet with a veteran

NOTE Confidence: 0.8110939

00:29:28.454 --> 00:29:30.599 or an active duty service member.

NOTE Confidence: 0.8110939

00:29:30.600 --> 00:29:32.274 How often you'll get an answer

NOTE Confidence: 0.8110939

00:29:32.274 --> 00:29:34.728 of yes if you ask them if they

NOTE Confidence: 0.8110939

00:29:34.728 --> 00:29:36.313 have weapons in the bedroom,

NOTE Confidence: 0.8110939

00:29:36.320 --> 00:29:37.830 particularly even in the bed.

NOTE Confidence: 0.8110939

00:29:37.830 --> 00:29:39.916 So we've had service members that sleep

NOTE Confidence: 0.8110939

00:29:39.916 --> 00:29:42.170 with a combat knife under the pillow.

NOTE Confidence: 0.8110939

00:29:42.170 --> 00:29:44.645 Or they have a handgun in the bedside table,

NOTE Confidence: 0.8110939

00:29:44.650 --> 00:29:46.568 or even multiple weapons in the bedroom.

NOTE Confidence: 0.8110939

00:29:46.570 --> 00:29:47.395 It's really astounding,

NOTE Confidence: 0.8110939

00:29:47.395 --> 00:29:48.220 and it did.

NOTE Confidence: 0.8110939

00:29:48.220 --> 00:29:49.870 It doesn't really come out in

NOTE Confidence: 0.8110939

00:29:49.870 --> 00:29:50.970 less you specifically ask.

NOTE Confidence: 0.8992421

00:29:53.580 --> 00:29:57.351 We know that sleep is a risk for psychiatric

NOTE Confidence: 0.8992421

00:29:57.351 --> 00:30:00.260 disorders and that psychiatric diagnosis.

NOTE Confidence: 0.8992421

00:30:00.260 --> 00:30:02.222 Occur more frequently in folks that

NOTE Confidence: 0.8992421

00:30:02.222 --> 00:30:04.150 have pre existing sleep disorders,

NOTE Confidence: 0.8992421

00:30:04.150 --> 00:30:06.565 and we know that insomnia or objectively

NOTE Confidence: 0.8992421

00:30:06.565 --> 00:30:08.400 diagnose sleep disorders like insomnia,

NOTE Confidence: 0.8992421

00:30:08.400 --> 00:30:10.270 OSA, insufficient sleep are all

NOTE Confidence: 0.8992421

00:30:10.270 --> 00:30:12.140 independent risk factors for developing

NOTE Confidence: 0.8992421

00:30:12.199 --> 00:30:13.834 behavioral health disorders and over

NOTE Confidence: 0.8992421

00:30:13.834 --> 00:30:15.840 the ensuing three to five years.

NOTE Confidence: 0.8992421

00:30:15.840 --> 00:30:17.605 And they tend to pretend

NOTE Confidence: 0.8992421

00:30:17.605 --> 00:30:19.017 a much worse outcome.

NOTE Confidence: 0.8992421

00:30:19.020 --> 00:30:20.790 In particular, risk of suicide.

NOTE Confidence: 0.8992421

00:30:20.790 --> 00:30:22.555 So there's been an increasing

NOTE Confidence: 0.8992421

00:30:22.555 --> 00:30:23.614 body of literature,

NOTE Confidence: 0.8992421

00:30:23.620 --> 00:30:25.395 both in the military and

NOTE Confidence: 0.8992421

00:30:25.395 --> 00:30:26.460 outside the military,

NOTE Confidence: 0.8992421

00:30:26.460 --> 00:30:29.071 that then we'll get into this a

NOTE Confidence: 0.8992421

00:30:29.071 --> 00:30:31.860 little bit more later that looks at.

NOTE Confidence: 0.8992421

00:30:31.860 --> 00:30:34.555 Kind of the impact of sleep disorders

NOTE Confidence: 0.8992421

00:30:34.555 --> 00:30:36.830 on increasing your risk for suicide

NOTE Confidence: 0.8992421

00:30:36.830 --> 00:30:39.280 and suicide's been a huge issue in

NOTE Confidence: 0.8992421

00:30:39.356 --> 00:30:41.897 the military for a number of reasons,

NOTE Confidence: 0.8992421

00:30:41.900 --> 00:30:44.090 but we've seen spikes in cases

NOTE Confidence: 0.8992421

00:30:44.090 --> 00:30:46.000 of suicides in the army,

NOTE Confidence: 0.8992421

00:30:46.000 --> 00:30:47.660 especially with the frequent deployments

NOTE Confidence: 0.8992421

00:30:47.660 --> 00:30:49.320 and separation from family and

NOTE Confidence: 0.8992421

00:30:49.373 --> 00:30:51.197 inadequate behavioral health resources.

NOTE Confidence: 0.84590757

00:30:53.300 --> 00:30:55.265 Sleep complaints notably worse outcomes

NOTE Confidence: 0.84590757

00:30:55.265 --> 00:30:57.230 in post traumatic stress disorder,

NOTE Confidence: 0.84590757

00:30:57.230 --> 00:31:00.366 so we have a you know probably 30%

NOTE Confidence: 0.84590757

00:31:00.370 --> 00:31:03.072 of service members who have had a

NOTE Confidence: 0.84590757

00:31:03.072 --> 00:31:05.103 combat deployment will come back

NOTE Confidence: 0.84590757

00:31:05.103 --> 00:31:07.503 and get a diagnosis and evidence

NOTE Confidence: 0.84590757

00:31:07.503 --> 00:31:09.410 based diagnosis of PTSD nearby.

NOTE Confidence: 0.84590757

00:31:09.410 --> 00:31:11.768 A doctoral level behavioral health provider,

NOTE Confidence: 0.84590757

00:31:11.770 --> 00:31:13.730 whether it's a clinical psychologist

NOTE Confidence: 0.84590757

00:31:13.730 --> 00:31:16.475 or psychiatrist, but using kind of an

NOTE Confidence: 0.84590757

00:31:16.475 --> 00:31:18.850 evidence based metric for diagnosing PTSD,

NOTE Confidence: 0.84590757

00:31:18.850 --> 00:31:21.196 say 30% of deployed service members.

NOTE Confidence: 0.84590757

00:31:21.200 --> 00:31:23.558 And we know that sleep disorders,

NOTE Confidence: 0.84590757

00:31:23.560 --> 00:31:25.135 whether it's insufficient.

NOTE Confidence: 0.84590757

00:31:25.135 --> 00:31:27.760 Sleep fragmented sleep daytime sleepiness

NOTE Confidence: 0.84590757

00:31:27.760 --> 00:31:30.582 that sleep complaints are a Cardinal

NOTE Confidence: 0.84590757

00:31:30.582 --> 00:31:32.707 feature or diagnostic criteria of

NOTE Confidence: 0.84590757

00:31:32.707 --> 00:31:35.580 PTSD and that they they make it much

NOTE Confidence: 0.84590757

00:31:35.580 --> 00:31:37.905 more challenging to treat an already

NOTE Confidence: 0.84590757

00:31:37.905 --> 00:31:39.645 difficult population to manage.

NOTE Confidence: 0.84590757

00:31:39.650 --> 00:31:42.534 We know that patients with PTSD have

NOTE Confidence: 0.84590757

00:31:42.534 --> 00:31:44.763 lower compliance across the board

NOTE Confidence: 0.84590757

00:31:44.763 --> 00:31:47.068 with really all health interventions,

NOTE Confidence: 0.84590757

00:31:47.070 --> 00:31:49.938 so you know worse compliance with

NOTE Confidence: 0.84590757

00:31:49.938 --> 00:31:51.850 taking into hypertensives worse

NOTE Confidence: 0.84590757

00:31:51.932 --> 00:31:54.467 compliance with going to outpatient

NOTE Confidence: 0.84590757

00:31:54.467 --> 00:31:56.495 mental health care visits.

NOTE Confidence: 0.84590757

00:31:56.500 --> 00:31:58.340 Worst compliance with taking

NOTE Confidence: 0.84590757

00:31:58.340 --> 00:31:59.260 psychoactive medications.

NOTE Confidence: 0.84590757

00:31:59.260 --> 00:32:01.560 Works compliance if you're looking

NOTE Confidence: 0.84590757

00:32:01.560 --> 00:32:03.860 at HIV patients with PTSD,

NOTE Confidence: 0.84590757

00:32:03.860 --> 00:32:06.620 lower lower usage of heart therapy,

NOTE Confidence: 0.84590757

00:32:06.620 --> 00:32:08.460 and higher risk dramatically

NOTE Confidence: 0.84590757

00:32:08.460 --> 00:32:10.760 higher risk of suicide either.

NOTE Confidence: 0.84590757

00:32:10.760 --> 00:32:12.140 Suicidality, suicidal thoughts,

NOTE Confidence: 0.84590757

00:32:12.140 --> 00:32:13.980 or behaviors in addition

NOTE Confidence: 0.84590757

00:32:13.980 --> 00:32:15.360 to completed suicides.

NOTE Confidence: 0.84590757

00:32:15.360 --> 00:32:17.660 Among patients who have PTSD

NOTE Confidence: 0.84590757

00:32:17.660 --> 00:32:19.960 with a concurrent sleep disorder.

NOTE Confidence: 0.84590757

00:32:19.960 --> 00:32:22.720 So this is a big issue.

NOTE Confidence: 0.84590757

00:32:22.720 --> 00:32:27.268 High stakes for a vulnerable population.

NOTE Confidence: 0.84590757

00:32:27.270 --> 00:32:29.502 And we know that clearly there's

NOTE Confidence: 0.84590757

00:32:29.502 --> 00:32:30.618 this this interplay.

NOTE Confidence: 0.84590757

00:32:30.620 --> 00:32:32.445 You know that sleep disorders

NOTE Confidence: 0.84590757

00:32:32.445 --> 00:32:35.079 and PTSD feed off of 1 another.

NOTE Confidence: 0.84590757

00:32:35.080 --> 00:32:38.428 So as as folks are not getting enough sleep,

NOTE Confidence: 0.84590757

00:32:38.430 --> 00:32:39.402 if they are,

NOTE Confidence: 0.84590757

00:32:39.402 --> 00:32:41.022 you know will have service

NOTE Confidence: 0.84590757

00:32:41.022 --> 00:32:42.889 members who are hypervigilant,

NOTE Confidence: 0.84590757

00:32:42.890 --> 00:32:44.814 especially special operations folks

NOTE Confidence: 0.84590757

00:32:44.814 --> 00:32:47.219 who returned from deployment and

NOTE Confidence: 0.84590757

00:32:47.219 --> 00:32:49.743 they have a lot of trouble sleeping

NOTE Confidence: 0.84590757

00:32:49.743 --> 00:32:52.316 at home or sleeping in bed and

NOTE Confidence: 0.84590757

00:32:52.316 --> 00:32:53.896 they sometimes find themselves.

NOTE Confidence: 0.84590757

00:32:53.900 --> 00:32:55.568 Sort of perceiving themselves as the

NOTE Confidence: 0.84590757

00:32:55.568 --> 00:32:57.303 Guardian of the house and watching

NOTE Confidence: 0.84590757

00:32:57.303 --> 00:32:59.025 over the safety of their household,

NOTE Confidence: 0.84590757

00:32:59.030 --> 00:33:01.025 and that that's what they're responsible for.

NOTE Confidence: 0.84590757

00:33:01.030 --> 00:33:03.025 And they have a lot of trouble

NOTE Confidence: 0.84590757

00:33:03.025 --> 00:33:03.880 sleeping at night.

NOTE Confidence: 0.84590757

00:33:03.880 --> 00:33:05.016 And then you know,

NOTE Confidence: 0.84590757

00:33:05.016 --> 00:33:05.868 they're sleeping in,

NOTE Confidence: 0.84590757

00:33:05.870 --> 00:33:08.446 like sleeping on the couch or in

NOTE Confidence: 0.84590757

00:33:08.446 --> 00:33:10.990 other places during the day and kind

NOTE Confidence: 0.84590757

00:33:10.990 --> 00:33:13.390 of cat napping around the Clock and.

NOTE Confidence: 0.84590757

00:33:13.390 --> 00:33:16.342 And so this can then lead to if you're

NOTE Confidence: 0.84590757

00:33:16.342 --> 00:33:18.679 getting chronic insufficient sleep,

NOTE Confidence: 0.84590757

00:33:18.680 --> 00:33:21.290 there's some literature from the 90s

NOTE Confidence: 0.84590757

00:33:21.290 --> 00:33:23.931 showing you can actually have worsened

NOTE Confidence: 0.84590757

00:33:23.931 --> 00:33:26.822 airway tone enough to where you can

NOTE Confidence: 0.84590757

00:33:26.822 --> 00:33:29.667 increase your RDI into the mild OSA range.

NOTE Confidence: 0.84590757

00:33:29.670 --> 00:33:32.106 So there is maybe a mechanism,

NOTE Confidence: 0.84590757

00:33:32.110 --> 00:33:33.734 although kind of weak,

NOTE Confidence: 0.84590757

00:33:33.734 --> 00:33:34.546 chronic insufficiently,

NOTE Confidence: 0.84590757

00:33:34.550 --> 00:33:37.025 maybe reducing airway tone or

NOTE Confidence: 0.84590757

00:33:37.025 --> 00:33:39.005 responsiveness and leading to

NOTE Confidence: 0.84590757

00:33:39.005 --> 00:33:41.180 sleep disordered breathing.

NOTE Confidence: 0.84590757

00:33:41.180 --> 00:33:43.046 With with these patients that have

NOTE Confidence: 0.84590757

00:33:43.046 --> 00:33:45.595 PTSD and that are on an ice depressants

NOTE Confidence: 0.84590757

00:33:45.595 --> 00:33:47.880 which can suppress REM in some cases.

NOTE Confidence: 0.84590757

00:33:47.880 --> 00:33:49.868 And when we do sleep studies on

NOTE Confidence: 0.84590757

00:33:49.868 --> 00:33:51.801 our folks with PTSD will usually

NOTE Confidence: 0.84590757

00:33:51.801 --> 00:33:53.835 see very fragmented sleep most of

NOTE Confidence: 0.84590757

00:33:53.835 --> 00:33:56.170 the night is spending like 40% of

NOTE Confidence: 0.84590757

00:33:56.170 --> 00:33:57.770 the night spent in N1.

NOTE Confidence: 0.84590757

00:33:57.770 --> 00:34:00.416 It's hard to know how much of this is

NOTE Confidence: 0.84590757

00:34:00.416 --> 00:34:03.508 sort of first night effect in the sleep lab,

NOTE Confidence: 0.84590757

00:34:03.510 --> 00:34:05.568 and how much is kind of their

NOTE Confidence: 0.84590757

00:34:05.568 --> 00:34:07.660 day-to-day but very poor quality sleep,

NOTE Confidence: 0.84590757

00:34:07.660 --> 00:34:10.522 and not enough of our deeper stages of sleep,

NOTE Confidence: 0.847828075333333

00:34:10.530 --> 00:34:12.034 which. Yeah, there's increasing

NOTE Confidence: 0.847828075333333

00:34:12.034 --> 00:34:14.803 literature looking at the role of RAM

NOTE Confidence: 0.847828075333333

00:34:14.803 --> 00:34:16.607 and emotional memory consolidation,

NOTE Confidence: 0.847828075333333

00:34:16.610 --> 00:34:19.418 so your ability to kind of recover and

NOTE Confidence: 0.847828075333333

00:34:19.418 --> 00:34:21.209 process emotionally traumatic events,

NOTE Confidence: 0.847828075333333

00:34:21.210 --> 00:34:22.742 which is really important

NOTE Confidence: 0.847828075333333

00:34:22.742 --> 00:34:24.657 in PTSD and mental illness,

NOTE Confidence: 0.847828075333333

00:34:24.660 --> 00:34:26.940 and is covered nicely in this

NOTE Confidence: 0.847828075333333

00:34:26.940 --> 00:34:28.870 article by Ali El Sol.

NOTE Confidence: 0.847828075333333

00:34:28.870 --> 00:34:31.168 I think he's from Suni Buffalo,

NOTE Confidence: 0.847828075333333

00:34:31.170 --> 00:34:33.956 and he's done a lot of great

NOTE Confidence: 0.847828075333333

00:34:33.956 --> 00:34:36.798 work on PTSD and sleep apnea.

NOTE Confidence: 0.847828075333333

00:34:36.800 --> 00:34:39.292 And this was a nice review article

NOTE Confidence: 0.847828075333333

00:34:39.292 --> 00:34:42.219 that he did in Annals ATS and 2015.

NOTE Confidence: 0.847828075333333

00:34:42.220 --> 00:34:44.565 This vanlent is an author with a

NOTE Confidence: 0.847828075333333

00:34:44.565 --> 00:34:46.288 sleep researcher that works for

NOTE Confidence: 0.847828075333333

00:34:46.288 --> 00:34:48.256 the Dutch military and has done

NOTE Confidence: 0.847828075333333

00:34:48.256 --> 00:34:50.257 some really nice review papers

NOTE Confidence: 0.847828075333333

00:34:50.257 --> 00:34:51.957 and studies putting together.

NOTE Confidence: 0.847828075333333

00:34:51.960 --> 00:34:54.162 Kind of illustrating the link between

NOTE Confidence: 0.847828075333333

00:34:54.162 --> 00:34:56.289 PTSD and sleep disorders over here.

NOTE Confidence: 0.847828075333333

00:34:56.290 --> 00:34:58.634 There's a lot of work by Barry Krakow

NOTE Confidence: 0.847828075333333

00:34:58.634 --> 00:35:00.629 looking at different populations,

NOTE Confidence: 0.847828075333333

00:35:00.630 --> 00:35:01.734 natural disaster victims,

NOTE Confidence: 0.847828075333333

00:35:01.734 --> 00:35:04.600 sexual assault victims and the risk of OSA.

NOTE Confidence: 0.847828075333333

00:35:04.600 --> 00:35:07.190 The quality is a little.

NOTE Confidence: 0.847828075333333

00:35:07.190 --> 00:35:08.554 Questionable in some cases.

NOTE Confidence: 0.847828075333333

00:35:08.554 --> 00:35:09.577 Usually cohort studies,

NOTE Confidence: 0.847828075333333

00:35:09.580 --> 00:35:10.944 smaller populations and and

NOTE Confidence: 0.847828075333333

00:35:10.944 --> 00:35:12.308 oftentimes not using PSG.

NOTE Confidence: 0.847828075333333

00:35:12.310 --> 00:35:13.885 So sometimes these are folks

NOTE Confidence: 0.847828075333333

00:35:13.885 --> 00:35:15.145 with sleep disorder breathing

NOTE Confidence: 0.847828075333333

00:35:15.145 --> 00:35:16.739 based on subjective complaints,

NOTE Confidence: 0.847828075333333

00:35:16.740 --> 00:35:19.274 but that may you know where they're

NOTE Confidence: 0.847828075333333

00:35:19.274 --> 00:35:21.512 giving an estimate of 52% of rape.

NOTE Confidence: 0.847828075333333

00:35:21.512 --> 00:35:22.876 Survivors have sleep apnea,

NOTE Confidence: 0.847828075333333

00:35:22.880 --> 00:35:24.580 which is probably not accurate,

NOTE Confidence: 0.847828075333333

00:35:24.580 --> 00:35:26.967 but it's based more on questionnaire data,

NOTE Confidence: 0.847828075333333

00:35:26.970 --> 00:35:29.517 so you have to you have to sort of

NOTE Confidence: 0.847828075333333

00:35:29.517 --> 00:35:31.918 look at the literature with PTSD and

NOTE Confidence: 0.847828075333333

00:35:31.918 --> 00:35:34.891 OSA in terms of you know where these

NOTE Confidence: 0.847828075333333

00:35:34.891 --> 00:35:38.360 patients studied with the PSG or serve aid.

NOTE Confidence: 0.847828075333333

00:35:38.360 --> 00:35:40.680 And for subjective complaints.

NOTE Confidence: 0.847828075333333

00:35:40.680 --> 00:35:42.510 Then more traumatic your deployment,

NOTE Confidence: 0.847828075333333

00:35:42.510 --> 00:35:44.670 the higher risk you are for

NOTE Confidence: 0.847828075333333

00:35:44.670 --> 00:35:47.484 having PTSD and there is a high

NOTE Confidence: 0.847828075333333

00:35:47.484 --> 00:35:49.216 prevalence of obstructive sleep

NOTE Confidence: 0.847828075333333

00:35:49.216 --> 00:35:51.329 apnea among those with PTSD.

NOTE Confidence: 0.847828075333333

00:35:51.330 --> 00:35:53.322 Getting into the mechanism behind that

NOTE Confidence: 0.847828075333333

00:35:53.322 --> 00:35:55.880 can be a little more controversial.

NOTE Confidence: 0.847828075333333

00:35:55.880 --> 00:35:58.057 This is a study Chris Lettieri did.

NOTE Confidence: 0.847828075333333

00:35:58.060 --> 00:35:59.859 We did this together in 2016 and

NOTE Confidence: 0.847828075333333

00:35:59.859 --> 00:36:01.810 we had 200 service members that

NOTE Confidence: 0.847828075333333

00:36:01.810 --> 00:36:03.675 had come through our clinics.

NOTE Confidence: 0.847828075333333

00:36:03.680 --> 00:36:05.240 It's a cohort of people.

NOTE Confidence: 0.847828075333333

00:36:05.240 --> 00:36:07.333 We could kind of pull from our

NOTE Confidence: 0.847828075333333

00:36:07.333 --> 00:36:09.299 own data 50 in each group.

NOTE Confidence: 0.847828075333333

00:36:09.300 --> 00:36:11.166 You know, PTSD plus sleep apnea,

NOTE Confidence: 0.847828075333333

00:36:11.170 --> 00:36:12.362 PTSD without sleep apnea,

NOTE Confidence: 0.847828075333333

00:36:12.362 --> 00:36:13.852 sleep apnea without PTSD and

NOTE Confidence: 0.847828075333333

00:36:13.852 --> 00:36:15.222 then quote unquote, normal.

NOTE Confidence: 0.847828075333333

00:36:15.222 --> 00:36:17.406 Or really just people that didn't have,

NOTE Confidence: 0.847828075333333

00:36:17.410 --> 00:36:18.698 didn't have sleep apnea,

NOTE Confidence: 0.847828075333333

00:36:18.698 --> 00:36:20.630 didn't have PTSD and didn't really

NOTE Confidence: 0.847828075333333

00:36:20.688 --> 00:36:22.704 end up with a formal sleep diagnosis.

NOTE Confidence: 0.847828075333333

00:36:22.710 --> 00:36:23.350 So again,

NOTE Confidence: 0.847828075333333

00:36:23.350 --> 00:36:25.910 this is important when you think about that.

NOTE Confidence: 0.847828075333333

00:36:25.910 --> 00:36:27.398 Quality of this study.

NOTE Confidence: 0.847828075333333

00:36:27.398 --> 00:36:28.514 This is interesting,

NOTE Confidence: 0.847828075333333

00:36:28.520 --> 00:36:30.758 but it's not necessarily a clean,

NOTE Confidence: 0.847828075333333

00:36:30.760 --> 00:36:31.825 true controlled population,

NOTE Confidence: 0.847828075333333

00:36:31.825 --> 00:36:33.955 but we found where that folks

NOTE Confidence: 0.847828075333333

00:36:33.955 --> 00:36:35.921 with sleep apnea PTSD have

NOTE Confidence: 0.847828075333333

00:36:35.921 --> 00:36:37.469 dramatically worse fatigue mood,

NOTE Confidence: 0.847828075333333

00:36:37.470 --> 00:36:39.708 lower sleep related, quality of life,

NOTE Confidence: 0.847828075333333

00:36:39.710 --> 00:36:40.742 and worse function.

NOTE Confidence: 0.847828075333333

00:36:40.742 --> 00:36:42.806 In terms of the functional outcomes

NOTE Confidence: 0.847828075333333

00:36:42.806 --> 00:36:44.930 of sleep questionnaire you know,

NOTE Confidence: 0.847828075333333

00:36:44.930 --> 00:36:48.927 then with either condition alone and that.

NOTE Confidence: 0.847828075333333

00:36:48.930 --> 00:36:51.667 Symptoms among those with PTSD in OSA

NOTE Confidence: 0.847828075333333

00:36:51.667 --> 00:36:54.303 are closer to those with obstructive

NOTE Confidence: 0.847828075333333

00:36:54.303 --> 00:36:57.523 sleep apnea as opposed to PTSD alone.

NOTE Confidence: 0.847828075333333

00:36:57.530 --> 00:37:00.230 So sleep apnea definitely makes

NOTE Confidence: 0.847828075333333

00:37:00.230 --> 00:37:01.850 things dramatically worse.

NOTE Confidence: 0.847828075333333

00:37:01.850 --> 00:37:04.405 And this was a paper in 2010.

NOTE Confidence: 0.847828075333333

00:37:04.410 --> 00:37:06.498 They kind of started my interest

NOTE Confidence: 0.847828075333333

00:37:06.498 --> 00:37:09.269 in the topic again by Doctor El Sol

NOTE Confidence: 0.847828075333333

00:37:09.269 --> 00:37:11.231 from from Sony that showed this

NOTE Confidence: 0.847828075333333

00:37:11.307 --> 00:37:13.557 was an older veterans population,

NOTE Confidence: 0.847828075333333

00:37:13.560 --> 00:37:15.756 around 148 or 150 older veterans,

NOTE Confidence: 0.8355916

00:37:15.760 --> 00:37:18.217 so more comorbidities were like Vietnam era

NOTE Confidence: 0.8355916

00:37:18.217 --> 00:37:20.512 veterans with more obesity, heart disease,

NOTE Confidence: 0.8355916

00:37:20.512 --> 00:37:21.610 metabolic syndrome, hypertension.

NOTE Confidence: 0.8355916

00:37:21.610 --> 00:37:24.643 These are more of your kind of typical OSA

NOTE Confidence: 0.8355916

00:37:24.643 --> 00:37:27.100 patients having moderate and severe OSA,

NOTE Confidence: 0.8355916

00:37:27.100 --> 00:37:28.930 and then this population had

NOTE Confidence: 0.8355916

00:37:28.930 --> 00:37:30.760 much lower compliance with CPAP,

NOTE Confidence: 0.8355916

00:37:30.760 --> 00:37:33.768 and so that was the point of this.

NOTE Confidence: 0.8355916

00:37:33.770 --> 00:37:35.762 Study was showing that in your

NOTE Confidence: 0.8355916

00:37:35.762 --> 00:37:37.480 patients with OSA and PTSD,

NOTE Confidence: 0.8355916

00:37:37.480 --> 00:37:40.370 that adherence is markedly lower.

NOTE Confidence: 0.8355916

00:37:40.370 --> 00:37:42.405 And that that folks that

NOTE Confidence: 0.8355916

00:37:42.405 --> 00:37:43.626 were excessively sleepy.

NOTE Confidence: 0.8355916

00:37:43.630 --> 00:37:45.916 Or maybe I'd better perception in

NOTE Confidence: 0.8355916

00:37:45.916 --> 00:37:48.120 terms of sleep related symptoms,

NOTE Confidence: 0.8355916

00:37:48.120 --> 00:37:49.752 had better CPAP adherence,

NOTE Confidence: 0.8355916

00:37:49.752 --> 00:37:50.976 which makes sense,

NOTE Confidence: 0.8355916

00:37:50.980 --> 00:37:53.428 and that improved Pap adherence lowered

NOTE Confidence: 0.8355916

00:37:53.428 --> 00:37:55.060 nightmare frequency and severity,

NOTE Confidence: 0.8355916

00:37:55.060 --> 00:37:58.805 which has been found in other studies.

NOTE Confidence: 0.8355916

00:37:58.810 --> 00:38:01.660 We did kind of a follow up study with fewer

NOTE Confidence: 0.8355916

00:38:01.735 --> 00:38:04.654 patients an and somehow still got published.

NOTE Confidence: 0.8355916

00:38:04.660 --> 00:38:07.441 So he had like half the number of patients

NOTE Confidence: 0.8355916

00:38:07.441 --> 00:38:10.507 is then we had but a different population.

NOTE Confidence: 0.8355916

00:38:10.510 --> 00:38:11.581 So younger veterans.

NOTE Confidence: 0.8355916

00:38:11.581 --> 00:38:14.787 These are people within six months to a year

NOTE Confidence: 0.8355916

00:38:14.787 --> 00:38:17.034 of coming back from Iraq or Afghanistan.

NOTE Confidence: 0.8355916

00:38:17.040 --> 00:38:18.528 So younger, thinner, healthier,

NOTE Confidence: 0.8355916

00:38:18.528 --> 00:38:21.123 so to speak 45 with PTSD and

NOTE Confidence: 0.8355916

00:38:21.123 --> 00:38:22.887 OSA and 45 kind of without.

NOTE Confidence: 0.8355916

00:38:22.890 --> 00:38:24.610 Not not a real control,

NOTE Confidence: 0.8355916

00:38:24.610 --> 00:38:27.655 but folks that did not have sleep

NOTE Confidence: 0.8355916

00:38:27.655 --> 00:38:30.358 apnea and did not have PTSD.

NOTE Confidence: 0.8355916

00:38:30.360 --> 00:38:32.205 We found much more comorbid

NOTE Confidence: 0.8355916

00:38:32.205 --> 00:38:34.460 insomnia in the folks with PTSD.

NOTE Confidence: 0.8355916

00:38:34.460 --> 00:38:35.172 Not surprisingly,

NOTE Confidence: 0.8355916

00:38:35.172 --> 00:38:35.884 and insomnia,

NOTE Confidence: 0.8355916

00:38:35.884 --> 00:38:37.664 you know separate from PTSD

NOTE Confidence: 0.8355916

00:38:37.664 --> 00:38:38.940 in mood disorders.

NOTE Confidence: 0.8355916

00:38:38.940 --> 00:38:40.800 Insomnia is a big confounder

NOTE Confidence: 0.8355916

00:38:40.800 --> 00:38:41.916 in CPAP adherence.

NOTE Confidence: 0.8355916

00:38:41.920 --> 00:38:43.765 We found a market reduction

NOTE Confidence: 0.8355916

00:38:43.765 --> 00:38:45.610 in CPAP compliance across all

NOTE Confidence: 0.8355916

00:38:45.684 --> 00:38:47.886 metrics based on a data downloads.

NOTE Confidence: 0.8355916

00:38:47.890 --> 00:38:50.128 We use mostly Phillips Respironics devices,

NOTE Confidence: 0.8355916

00:38:50.130 --> 00:38:54.674 so from the Encore anywhere at that time.

NOTE Confidence: 0.8355916

00:38:54.680 --> 00:38:57.296 When we think about comorbid PTSD,

NOTE Confidence: 0.8355916

00:38:57.300 --> 00:39:00.108 OSA and insomnia.

NOTE Confidence: 0.8355916

00:39:00.110 --> 00:39:02.096 We know that among this patient,

NOTE Confidence: 0.8355916

00:39:02.100 --> 00:39:03.760 insomnia can be almost universal,

NOTE Confidence: 0.8355916

00:39:03.760 --> 00:39:05.746 likely due to this hypervigilant state.

NOTE Confidence: 0.8355916

00:39:05.750 --> 00:39:07.538 Not surprising when we think back

NOTE Confidence: 0.8355916

00:39:07.538 --> 00:39:09.484 to some of the literature from

NOTE Confidence: 0.8355916

00:39:09.484 --> 00:39:11.536 World War Two about like this

NOTE Confidence: 0.8355916

00:39:11.536 --> 00:39:13.654 notion of being hacked to death

NOTE Confidence: 0.8355916

00:39:13.654 --> 00:39:15.706 in trenches in the South Pacific.

NOTE Confidence: 0.8355916

00:39:15.710 --> 00:39:18.310 If you fell asleep or sort of the

NOTE Confidence: 0.8355916

00:39:18.310 --> 00:39:19.922 realization that a service member

NOTE Confidence: 0.8355916

00:39:19.922 --> 00:39:22.451 may come to that they they go after

NOTE Confidence: 0.8355916

00:39:22.451 --> 00:39:24.677 high value targets in their sleep,

NOTE Confidence: 0.8355916

00:39:24.680 --> 00:39:26.678 then not surprisingly makes it harder

NOTE Confidence: 0.8355916

00:39:26.678 --> 00:39:28.484 for people to feel comfortable

NOTE Confidence: 0.8355916

00:39:28.484 --> 00:39:30.519 sleeping when they come home.

NOTE Confidence: 0.8355916

00:39:30.520 --> 00:39:34.016 So we see kind of that these sleep

NOTE Confidence: 0.8355916

00:39:34.016 --> 00:39:36.388 complaints together just have a

NOTE Confidence: 0.8355916

00:39:36.388 --> 00:39:38.738 significantly bad impact on whether

NOTE Confidence: 0.8355916

00:39:38.738 --> 00:39:42.108 it's rates of major depressive disorder,

NOTE Confidence: 0.8355916

00:39:42.110 --> 00:39:44.530 suicidality need for antidepressive therapy,

NOTE Confidence: 0.8355916

00:39:44.530 --> 00:39:48.090 and certainly worsened puppet hearings.

NOTE Confidence: 0.8355916

00:39:48.090 --> 00:39:50.624 Another issue that's come up else always

NOTE Confidence: 0.8355916

00:39:50.624 --> 00:39:53.279 talked about this and so of other authors.

NOTE Confidence: 0.8355916

00:39:53.280 --> 00:39:55.560 And is this idea of low arousal threshold

NOTE Confidence: 0.8355916

00:39:55.560 --> 00:39:58.262 so we know that patients with obstructive

NOTE Confidence: 0.8355916

00:39:58.262 --> 00:40:00.327 sleep apnea have different fees.

NOTE Confidence: 0.8355916

00:40:00.330 --> 00:40:02.250 Types and we we all it makes sense

NOTE Confidence: 0.8355916

00:40:02.250 --> 00:40:04.382 to all of us that there are folks

NOTE Confidence: 0.8355916

00:40:04.382 --> 00:40:06.463 that are obese and have metabolic

NOTE Confidence: 0.8355916

00:40:06.463 --> 00:40:07.906 syndrome and hypertension.

NOTE Confidence: 0.8355916

00:40:07.910 --> 00:40:09.954 Anna huge neck with a High Peak

NOTE Confidence: 0.8355916

00:40:09.954 --> 00:40:11.555 written a collapsible airway and

NOTE Confidence: 0.8355916

00:40:11.555 --> 00:40:13.541 those folks are a little more

NOTE Confidence: 0.8355916

00:40:13.541 --> 00:40:14.868 straightforward for most of us,

NOTE Confidence: 0.8355916

00:40:14.870 --> 00:40:16.697 and many of those folks are going

NOTE Confidence: 0.8355916

00:40:16.697 --> 00:40:19.281 to be more here with Pap and be

NOTE Confidence: 0.8355916

00:40:19.281 --> 00:40:20.325 just more straightforward.

NOTE Confidence: 0.8355916

00:40:20.330 --> 00:40:22.444 More benefit from CPAP to begin with.

NOTE Confidence: 0.8355916

00:40:22.450 --> 00:40:25.150 What we find in our folks with PTSD is many

NOTE Confidence: 0.7909244

00:40:25.221 --> 00:40:27.297 of them have really bad insomnia,

NOTE Confidence: 0.7909244

00:40:27.300 --> 00:40:29.428 their younger, so you don't see much

NOTE Confidence: 0.7909244

00:40:29.428 --> 00:40:31.180 hypoxemia on their sleep studies.

NOTE Confidence: 0.7909244

00:40:31.180 --> 00:40:33.616 You'll see a lot of high pop,

NOTE Confidence: 0.7909244

00:40:33.620 --> 00:40:36.388 Mia's and depending on the score you know

NOTE Confidence: 0.7909244

00:40:36.388 --> 00:40:39.525 you could debate many of those high pop news.

NOTE Confidence: 0.7909244

00:40:39.530 --> 00:40:41.618 If you're picking apart the hi,

NOTE Confidence: 0.7909244

00:40:41.620 --> 00:40:43.864 especially if you're in a system

NOTE Confidence: 0.7909244

00:40:43.864 --> 00:40:46.139 unit using their era or an RDI,

NOTE Confidence: 0.7909244

00:40:46.140 --> 00:40:48.772 it's very easy for someone to end up

NOTE Confidence: 0.7909244

00:40:48.772 --> 00:40:51.707 you know who has bad PTSD and insomnia,

NOTE Confidence: 0.7909244

00:40:51.710 --> 00:40:52.868 and hyper vigilance.

NOTE Confidence: 0.7909244

00:40:52.868 --> 00:40:55.943 Getting a diagnosis of mild OSA because it's

NOTE Confidence: 0.7909244

00:40:55.943 --> 00:40:58.661 so easy to get that diagnosis of mild OSA,

NOTE Confidence: 0.7909244

00:40:58.670 --> 00:41:00.354 especially someone that has

NOTE Confidence: 0.7909244

00:41:00.354 --> 00:41:02.459 light kind of fragmented sleep.

NOTE Confidence: 0.7909244

00:41:02.460 --> 00:41:04.644 And so Danny Ecker has done some

NOTE Confidence: 0.7909244

00:41:04.644 --> 00:41:05.977 research with Oesophageal Manometry

NOTE Confidence: 0.7909244

00:41:05.977 --> 00:41:08.350 where they sort of defined this low

NOTE Confidence: 0.7909244

00:41:08.350 --> 00:41:09.999 arousal threshold phenotype in OSA.

NOTE Confidence: 0.7909244

00:41:10.000 --> 00:41:12.624 Or folks that with kind of you know,

NOTE Confidence: 0.7909244

00:41:12.630 --> 00:41:14.265 a minimal reduction in airflow

NOTE Confidence: 0.7909244

00:41:14.265 --> 00:41:15.573 having arousal from sleep.

NOTE Confidence: 0.7909244

00:41:15.580 --> 00:41:17.428 And it prevents you from getting

NOTE Confidence: 0.7909244

00:41:17.428 --> 00:41:19.421 into deeper stages of sleep and

NOTE Confidence: 0.7909244

00:41:19.421 --> 00:41:20.825 having as refreshing sleep.

NOTE Confidence: 0.7909244

00:41:20.830 --> 00:41:24.022 And he did a nice study in 2014 in the Blue

NOTE Confidence: 0.7909244

00:41:24.022 --> 00:41:26.724 Journal sort of showing that you know,

NOTE Confidence: 0.7909244

00:41:26.730 --> 00:41:28.986 because it's not feasible to do

NOTE Confidence: 0.7909244

00:41:28.986 --> 00:41:30.846 oesophageal manometry on everybody that

NOTE Confidence: 0.7909244

00:41:30.846 --> 00:41:33.174 you can make kind of a non invasive

NOTE Confidence: 0.7909244

00:41:33.174 --> 00:41:35.179 definition of low arousal threshold and.

NOTE Confidence: 0.7909244

00:41:35.180 --> 00:41:37.532 And what that's defined is as

NOTE Confidence: 0.7909244

00:41:37.532 --> 00:41:39.100 folks that you know,

NOTE Confidence: 0.7909244

00:41:39.100 --> 00:41:41.055 their oxygen saturation nadir is

NOTE Confidence: 0.7909244

00:41:41.055 --> 00:41:44.225 above 83% more than half of their

NOTE Confidence: 0.7909244

00:41:44.225 --> 00:41:46.133 sleep disordered breathing events

NOTE Confidence: 0.7909244

00:41:46.133 --> 00:41:48.329 are obstructed by Papias.

NOTE Confidence: 0.7909244

00:41:48.330 --> 00:41:49.885 And kind of mild moderate

NOTE Confidence: 0.7909244

00:41:49.885 --> 00:41:51.690 severity in terms of the HI,

NOTE Confidence: 0.7909244

00:41:51.690 --> 00:41:54.738 so it's so this is really kind of

NOTE Confidence: 0.7909244

00:41:54.738 --> 00:41:57.917 fits in with what we see in PTSD.

NOTE Confidence: 0.7909244

00:41:57.920 --> 00:41:59.512 That it's a hypervigilant

NOTE Confidence: 0.7909244

00:41:59.512 --> 00:42:01.900 group with a lot of insomnia.

NOTE Confidence: 0.7909244

00:42:01.900 --> 00:42:03.890 A lot of psycho pharmacy,

NOTE Confidence: 0.7909244

00:42:03.890 --> 00:42:05.420 and.

NOTE Confidence: 0.7909244

00:42:05.420 --> 00:42:07.165 Some questionable hypocapnia is enough

NOTE Confidence: 0.7909244

00:42:07.165 --> 00:42:10.098 to put them into the mild range for OSA,

NOTE Confidence: 0.7909244

00:42:10.100 --> 00:42:11.770 not a lot of hypoxemia,

NOTE Confidence: 0.7909244

00:42:11.770 --> 00:42:12.769 and not surprisingly,

NOTE Confidence: 0.7909244

00:42:12.769 --> 00:42:14.767 these people don't use their CPAP,

NOTE Confidence: 0.7909244

00:42:14.770 --> 00:42:16.898 so it's it is almost a little more

NOTE Confidence: 0.7909244

00:42:16.898 --> 00:42:19.278 of a concern that you sort of

NOTE Confidence: 0.7909244

00:42:19.278 --> 00:42:21.505 confound things and cause a little

NOTE Confidence: 0.7909244

00:42:21.505 --> 00:42:23.785 bit of harm for this population,

NOTE Confidence: 0.7909244

00:42:23.790 --> 00:42:25.110 or muddy the waters.

NOTE Confidence: 0.7909244

00:42:25.110 --> 00:42:26.760 Iatrogenic Lee by giving them

NOTE Confidence: 0.7909244

00:42:26.760 --> 00:42:28.470 this diagnosis of mild OSA,

NOTE Confidence: 0.7909244

00:42:28.470 --> 00:42:29.472 which probably isn't,

NOTE Confidence: 0.7909244

00:42:29.472 --> 00:42:30.140 you know,

NOTE Confidence: 0.7909244

00:42:30.140 --> 00:42:32.528 a big piece of what's causing

NOTE Confidence: 0.7909244

00:42:32.528 --> 00:42:34.850 their disability in terms of sleep.

NOTE Confidence: 0.7909244

00:42:34.850 --> 00:42:36.635 Anne Anne Anne where they're not going

NOTE Confidence: 0.7909244

00:42:36.635 --> 00:42:39.319 to have a response to seep out in some cases,

NOTE Confidence: 0.7909244

00:42:39.320 --> 00:42:41.424 kind of to be more concrete about that.

NOTE Confidence: 0.7909244

00:42:41.430 --> 00:42:42.755 These patients may see their

NOTE Confidence: 0.7909244

00:42:42.755 --> 00:42:43.815 psychiatrist who and complained

NOTE Confidence: 0.7909244

00:42:43.815 --> 00:42:45.294 that they're not getting better with

NOTE Confidence: 0.7909244

00:42:45.294 --> 00:42:46.950 regards to their PTSD and nightmares,

NOTE Confidence: 0.7909244

00:42:46.950 --> 00:42:48.260 and the psychiatrist or psychologist

NOTE Confidence: 0.7909244

00:42:48.260 --> 00:42:49.597 might say, well, you know,

NOTE Confidence: 0.7909244

00:42:49.597 --> 00:42:51.211 your sleep doctor noted that you

NOTE Confidence: 0.7909244

00:42:51.211 --> 00:42:52.771 have sleep apnea and you're not

NOTE Confidence: 0.7909244

00:42:52.771 --> 00:42:54.589 using your CPAP and so you really

NOTE Confidence: 0.7909244

00:42:54.589 --> 00:42:56.149 need to start using your CPAP.

NOTE Confidence: 0.7909244

00:42:56.150 --> 00:42:58.100 And that's the problem when really

NOTE Confidence: 0.7909244

00:42:58.100 --> 00:43:00.351 this is someone who has mild or

NOTE Confidence: 0.7909244

00:43:00.351 --> 00:43:02.121 borderline OSA who's not going to

NOTE Confidence: 0.7909244

00:43:02.121 --> 00:43:04.407 get much benefit from C pap therapy.

NOTE Confidence: 0.7909244

00:43:04.410 --> 00:43:07.399 And who really needs more help from

NOTE Confidence: 0.7909244

00:43:07.399 --> 00:43:10.081 a mood disorder standpoint so it

NOTE Confidence: 0.7909244

00:43:10.081 --> 00:43:12.703 can create a lot of confusion.

NOTE Confidence: 0.7909244

00:43:12.710 --> 00:43:16.206 So benefits of treatment in OSA and PTSD.

NOTE Confidence: 0.7909244

00:43:16.210 --> 00:43:18.828 We know that there have been a

NOTE Confidence: 0.7909244

00:43:18.828 --> 00:43:19.950 number of studies

NOTE Confidence: 0.8189128

00:43:20.034 --> 00:43:23.198 showing that you can get a significant

NOTE Confidence: 0.8189128

00:43:23.198 --> 00:43:26.510 improvement in PTSD symptoms based on this

NOTE Confidence: 0.8189128

00:43:26.510 --> 00:43:29.757 PTSD questionnaire called the PCL S&P CLM.

NOTE Confidence: 0.8189128

00:43:29.757 --> 00:43:32.379 So less sleepiness improves sleep quality,

NOTE Confidence: 0.8189128

00:43:32.380 --> 00:43:34.900 better daytime functioning, less depression.

NOTE Confidence: 0.8189128

00:43:34.900 --> 00:43:36.580 Can get big improvements in symptoms

NOTE Confidence: 0.8189128

00:43:36.580 --> 00:43:38.494 when folks with OSA and PTSD are

NOTE Confidence: 0.8189128

00:43:38.494 --> 00:43:39.964 compliant with CPAP and this is

NOTE Confidence: 0.8189128

00:43:39.964 --> 00:43:41.619 from Kathleen Sarmiento's Group.

NOTE Confidence: 0.8189128

00:43:41.620 --> 00:43:43.366 I think you see San Diego.

NOTE Confidence: 0.8189128

00:43:43.370 --> 00:43:45.890 She's another kind of big author

NOTE Confidence: 0.8189128

00:43:45.890 --> 00:43:48.830 in this field and a real leader.

NOTE Confidence: 0.8189128

00:43:48.830 --> 00:43:51.872 We know this is from Tim on in 2014.

NOTE Confidence: 0.8189128

00:43:51.880 --> 00:43:53.232 Another great paper showing

NOTE Confidence: 0.8189128

00:43:53.232 --> 00:43:54.584 market reduction in nightmares,

NOTE Confidence: 0.8189128

00:43:54.590 --> 00:43:56.042 frequency and nightmare severity,

NOTE Confidence: 0.8189128

00:43:56.042 --> 00:43:58.660 and folks with the use of C pap,

NOTE Confidence: 0.8189128

00:43:58.660 --> 00:44:01.092 and I remember citing this in a review

NOTE Confidence: 0.8189128

00:44:01.092 --> 00:44:03.644 paper we wrote an actually I had

NOTE Confidence: 0.8189128

00:44:03.644 --> 00:44:05.914 inadvertently like put my personal email

NOTE Confidence: 0.8189128

00:44:05.914 --> 00:44:08.498 on the author information and I got an

NOTE Confidence: 0.8189128

00:44:08.498 --> 00:44:10.678 email from an angry veteran saying that

NOTE Confidence: 0.8189128

00:44:10.678 --> 00:44:12.899 CPAP actually made his nightmares worse.

NOTE Confidence: 0.8189128

00:44:12.900 --> 00:44:15.084 So you will sometimes hear from

NOTE Confidence: 0.8189128

00:44:15.084 --> 00:44:17.528 folks with PTSD and nightmares that

NOTE Confidence: 0.8189128

00:44:17.528 --> 00:44:20.270 they get this worsening of their

NOTE Confidence: 0.8189128

00:44:20.270 --> 00:44:22.466 nightmares when they go on C pap.

NOTE Confidence: 0.8189128

00:44:22.470 --> 00:44:24.750 I haven't found it to be terribly common,

NOTE Confidence: 0.8189128

00:44:24.750 --> 00:44:25.954 but the thought is,

NOTE Confidence: 0.8189128

00:44:25.954 --> 00:44:27.760 if treating their sleep apnea facilitates

NOTE Confidence: 0.8189128

00:44:27.814 --> 00:44:29.630 more RAM or more deep sleep that they

NOTE Confidence: 0.8189128

00:44:29.630 --> 00:44:31.717 may then have more dreams or more

NOTE Confidence: 0.8189128

00:44:31.717 --> 00:44:33.297 opportunities for nightmares with other

NOTE Confidence: 0.8189128

00:44:33.300 --> 00:44:36.492 folks on the call may have a little

NOTE Confidence: 0.8189128

00:44:36.492 --> 00:44:39.128 more expertise in this realm than me.

NOTE Confidence: 0.8189128

00:44:39.130 --> 00:44:40.394 We did a study.

NOTE Confidence: 0.8189128

00:44:40.394 --> 00:44:41.974 This is that same population.

NOTE Confidence: 0.8189128

00:44:41.980 --> 00:44:44.516 Chris Litarion I did with our 200 patients.

NOTE Confidence: 0.8189128

00:44:44.520 --> 00:44:46.716 Kind of broken into those four

NOTE Confidence: 0.8189128

00:44:46.716 --> 00:44:48.580 categories and we showed that.

NOTE Confidence: 0.8189128

00:44:48.580 --> 00:44:51.036 The use of C pap in this population

NOTE Confidence: 0.8189128

00:44:51.036 --> 00:44:52.210 definitely improved symptoms,

NOTE Confidence: 0.8189128

00:44:52.210 --> 00:44:54.970 but a really diminished response to see path

NOTE Confidence: 0.8189128

00:44:54.970 --> 00:44:57.819 when you look at those with PTSD and OSA.

NOTE Confidence: 0.8189128

00:44:57.820 --> 00:44:59.272 So you get benefit,

NOTE Confidence: 0.8189128

00:44:59.272 --> 00:45:01.450 but it's it's not nearly what

NOTE Confidence: 0.8189128

00:45:01.533 --> 00:45:03.849 you would get in someone who

NOTE Confidence: 0.8189128

00:45:03.849 --> 00:45:05.840 has sleep apnea without PTSD.

NOTE Confidence: 0.8189128

00:45:05.840 --> 00:45:07.520 What are some alternative treatments?

NOTE Confidence: 0.8189128

00:45:07.520 --> 00:45:09.790 Because the PTSD population is

NOTE Confidence: 0.8189128

00:45:09.790 --> 00:45:12.060 notoriously non adherent in general

NOTE Confidence: 0.8189128

00:45:12.130 --> 00:45:14.825 and weather of any kind of medical

NOTE Confidence: 0.8189128

00:45:14.825 --> 00:45:16.751 intervention and very non adherent

NOTE Confidence: 0.8189128

00:45:16.751 --> 00:45:19.551 with CPAP unit which is what we found.

NOTE Confidence: 0.8189128

00:45:19.560 --> 00:45:21.768 So oral appliances have been studied,

NOTE Confidence: 0.8189128

00:45:21.770 --> 00:45:22.510 I think.

NOTE Confidence: 0.8189128

00:45:22.510 --> 00:45:24.360 Also by Kathleen Sarmiento's Group,

NOTE Confidence: 0.8189128

00:45:24.360 --> 00:45:26.205 and they've done some randomized

NOTE Confidence: 0.8189128

00:45:26.205 --> 00:45:28.050 clinical trials and I think.

NOTE Confidence: 0.81988126

00:45:30.890 --> 00:45:33.235 Doctor El Sol from Sony as well,

NOTE Confidence: 0.81988126

00:45:33.240 --> 00:45:34.995 so randomized control trials looking

NOTE Confidence: 0.81988126

00:45:34.995 --> 00:45:37.440 at the treatment of use of oral

NOTE Confidence: 0.81988126

00:45:37.440 --> 00:45:39.624 appliance in patients with PTSD and OSA,

NOTE Confidence: 0.81988126

00:45:39.630 --> 00:45:41.982 and in general what you find are

NOTE Confidence: 0.81988126

00:45:41.982 --> 00:45:42.990 subjectively pretty similar.

NOTE Confidence: 0.81988126

00:45:42.990 --> 00:45:45.475 Improvements with oral appliance or CPAP you

NOTE Confidence: 0.81988126

00:45:45.475 --> 00:45:47.689 you definitely don't get the same degree.

NOTE Confidence: 0.81988126

00:45:47.690 --> 00:45:50.378 You don't get a significant reduction in age.

NOTE Confidence: 0.81988126

00:45:50.380 --> 00:45:52.360 I with an oral appliance compared

NOTE Confidence: 0.81988126

00:45:52.360 --> 00:45:54.796 to path that were an improvement in

NOTE Confidence: 0.81988126

00:45:54.796 --> 00:45:56.890 hypoxemia to the same degree with

NOTE Confidence: 0.81988126

00:45:56.890 --> 00:45:59.448 an oral appliance as opposed to PAP.

NOTE Confidence: 0.81988126

00:45:59.450 --> 00:46:01.865 But the patients tend to feel like

NOTE Confidence: 0.81988126

00:46:01.865 --> 00:46:04.140 they're getting the same amount of

NOTE Confidence: 0.81988126

00:46:04.140 --> 00:46:06.090 benefit with regards to daytime

NOTE Confidence: 0.81988126

00:46:06.090 --> 00:46:08.066 sleepiness and compliance with an

NOTE Confidence: 0.81988126

00:46:08.066 --> 00:46:10.322 oral appliance tends to be better,

NOTE Confidence: 0.81988126

00:46:10.330 --> 00:46:12.969 so we've really tried to push more

NOTE Confidence: 0.81988126

00:46:12.969 --> 00:46:15.200 oral appliances with with our folks.

NOTE Confidence: 0.81988126

00:46:15.200 --> 00:46:17.080 Unfortunately, words gotten around that,

NOTE Confidence: 0.81988126

00:46:17.080 --> 00:46:19.180 you know, using an oral appliance

NOTE Confidence: 0.81988126

00:46:19.180 --> 00:46:21.824 to treat your sleep apnea does not

NOTE Confidence: 0.81988126

00:46:21.824 --> 00:46:23.774 yield the same disability rating

NOTE Confidence: 0.81988126

00:46:23.774 --> 00:46:26.080 as treating your sleep apnea with.

NOTE Confidence: 0.81988126

00:46:26.080 --> 00:46:26.828 With CPAP,

NOTE Confidence: 0.81988126

00:46:26.828 --> 00:46:29.115 the difference between a 30% and

NOTE Confidence: 0.81988126

00:46:29.115 --> 00:46:30.360 50% disability rating.

NOTE Confidence: 0.81988126

00:46:30.360 --> 00:46:34.050 Is when you hit 50% a certain portion of it,

NOTE Confidence: 0.81988126

00:46:34.050 --> 00:46:35.946 or the way your retirement comes

NOTE Confidence: 0.81988126

00:46:35.946 --> 00:46:37.590 to you becomes tax free.

NOTE Confidence: 0.81988126

00:46:37.590 --> 00:46:40.158 So if it so someone like a CPAP

NOTE Confidence: 0.81988126

00:46:40.158 --> 00:46:41.779 person with OSA on CPAP,

NOTE Confidence: 0.81988126

00:46:41.780 --> 00:46:44.167 that's like a 50% disability rating which

NOTE Confidence: 0.81988126

00:46:44.167 --> 00:46:46.289 is essentially $1000 tax free per month.

NOTE Confidence: 0.81988126

00:46:46.290 --> 00:46:47.900 The rest of your life.

NOTE Confidence: 0.81988126

00:46:47.900 --> 00:46:50.142 Once you have a 50% disability rating,

NOTE Confidence: 0.81988126

00:46:50.142 --> 00:46:53.050 it's not that hard to get up to 100%,

NOTE Confidence: 0.81988126

00:46:53.050 --> 00:46:55.060 and once you're 100% disabled it

NOTE Confidence: 0.81988126

00:46:55.060 --> 00:46:57.557 gets you about 3500 a month tax free.

NOTE Confidence: 0.81988126

00:46:57.560 --> 00:47:00.008 The rest of your life as well as

NOTE Confidence: 0.81988126

00:47:00.008 --> 00:47:02.149 preferential hiring and federal institutions.

NOTE Confidence: 0.81988126

00:47:02.150 --> 00:47:04.508 So there is a lot that goes into this,

NOTE Confidence: 0.81988126

00:47:04.510 --> 00:47:06.561 and it's not surprising that veterans are

NOTE Confidence: 0.81988126

00:47:06.561 --> 00:47:08.879 aware of this and that it factors into

NOTE Confidence: 0.81988126

00:47:08.879 --> 00:47:11.170 kind of interferes with our sleep treatment.

NOTE Confidence: 0.81988126

00:47:11.170 --> 00:47:11.641 Um?

NOTE Confidence: 0.81988126

00:47:11.641 --> 00:47:13.054 Let's see here.

NOTE Confidence: 0.81988126

00:47:13.054 --> 00:47:14.467 Sedative hypnotic use.

NOTE Confidence: 0.81988126

00:47:14.470 --> 00:47:16.319 So some people have said, well,

NOTE Confidence: 0.81988126

00:47:16.319 --> 00:47:18.412 maybe for these folks with low arousal

NOTE Confidence: 0.81988126

00:47:18.412 --> 00:47:20.668 threshold and there has been some literature.

NOTE Confidence: 0.81988126

00:47:20.670 --> 00:47:22.798 One study looking at Trazadone and failing

NOTE Confidence: 0.81988126

00:47:22.798 --> 00:47:25.320 to find kind of a benefit with Trazadone,

NOTE Confidence: 0.81988126

00:47:25.320 --> 00:47:28.016 but Lunesta there was a study done with

NOTE Confidence: 0.81988126

00:47:28.016 --> 00:47:30.111 his upper clone showing a reduction

NOTE Confidence: 0.81988126

00:47:30.111 --> 00:47:33.469 in the hi in folks that had a low

NOTE Confidence: 0.81988126

00:47:33.469 --> 00:47:35.574 arousal threshold that was significant.

NOTE Confidence: 0.81988126

00:47:35.580 --> 00:47:38.124 Chris Lettieri and I did some of this

NOTE Confidence: 0.81988126

00:47:38.124 --> 00:47:40.902 work with him and some with some of

NOTE Confidence: 0.81988126

00:47:40.902 --> 00:47:43.310 our other fellows showing kind of a

NOTE Confidence: 0.81988126

00:47:43.310 --> 00:47:45.536 benefit of using both Zolpidem in his

NOTE Confidence: 0.81988126

00:47:45.540 --> 00:47:47.424 upper clone and improving the quality

NOTE Confidence: 0.81988126

00:47:47.424 --> 00:47:49.520 of CPAP titrations and CPAP adherence.

NOTE Confidence: 0.81988126

00:47:49.520 --> 00:47:51.180 So there are some thoughts

NOTE Confidence: 0.81988126

00:47:51.180 --> 00:47:52.508 that maybe you know,

NOTE Confidence: 0.81988126

00:47:52.510 --> 00:47:54.040 for some patients we definitely

NOTE Confidence: 0.81988126

00:47:54.040 --> 00:47:55.570 use sedative hypnotics to to

NOTE Confidence: 0.81988126

00:47:55.627 --> 00:47:57.159 help with concurrent insomnia,

NOTE Confidence: 0.81988126

00:47:57.160 --> 00:47:59.309 but it's it's always a little bit

NOTE Confidence: 0.81988126

00:47:59.309 --> 00:48:01.748 of risk if you have a population

NOTE Confidence: 0.81988126

00:48:01.748 --> 00:48:04.356 that as weapons in the bedroom and

NOTE Confidence: 0.81988126

00:48:04.356 --> 00:48:06.504 as may be prone to parasomnia's.

NOTE Confidence: 0.81988126

00:48:06.510 --> 00:48:07.128 And you know,

NOTE Confidence: 0.81988126

00:48:07.128 --> 00:48:08.980 and and that are already on a number

NOTE Confidence: 0.81988126

00:48:08.980 --> 00:48:10.775 of Psycho Pharma pharmacologic agents.

NOTE Confidence: 0.81988126

00:48:10.780 --> 00:48:13.450 So I tend to try to be careful with that.

NOTE Confidence: 0.81988126

00:48:13.450 --> 00:48:15.322 Or at least IG knowledge that this is

NOTE Confidence: 0.81988126

00:48:15.322 --> 00:48:17.046 a different population where there are

NOTE Confidence: 0.81988126

00:48:17.046 --> 00:48:18.852 some other safety concerns that have

NOTE Confidence: 0.84167683

00:48:18.903 --> 00:48:20.616 to be thought about, like counseling the

NOTE Confidence: 0.84167683

00:48:20.616 --> 00:48:22.800 patient to not have weapons in the bedroom,

NOTE Confidence: 0.84167683

00:48:22.800 --> 00:48:25.122 or that they have to sort of agree that

NOTE Confidence: 0.84167683

00:48:25.122 --> 00:48:27.600 any weapons in the bedroom or in a safe.

NOTE Confidence: 0.8438143

00:48:30.180 --> 00:48:31.690 And so take away message.

NOTE Confidence: 0.8438143

00:48:31.690 --> 00:48:32.890 Sleep apnea is common

NOTE Confidence: 0.8438143

00:48:32.890 --> 00:48:34.090 PTSD and worsen symptoms.

NOTE Confidence: 0.8438143

00:48:34.090 --> 00:48:35.600 Treatment of OSA improves symptoms,

NOTE Confidence: 0.8438143

00:48:35.600 --> 00:48:37.483 but these but this really is limited

NOTE Confidence: 0.8438143

00:48:37.483 --> 00:48:39.898 by lack of adherence to PAP in this

NOTE Confidence: 0.8438143

00:48:39.898 --> 00:48:42.137 population and that there are some or

NOTE Confidence: 0.8438143

00:48:42.137 --> 00:48:44.027 all other therapies we can consider,

NOTE Confidence: 0.8438143

00:48:44.030 --> 00:48:44.930 especially oral appliances,

NOTE Confidence: 0.8438143

00:48:44.930 --> 00:48:46.130 and maybe send it,

NOTE Confidence: 0.8438143

00:48:46.130 --> 00:48:48.314 if not excpet some unique challenges in

NOTE Confidence: 0.8438143

00:48:48.314 --> 00:48:50.348 this population that we have to consider.

NOTE Confidence: 0.8438143

00:48:50.350 --> 00:48:52.861 I know I need to speed up a little

NOTE Confidence: 0.8438143

00:48:52.861 --> 00:48:55.787 bit of a little bit more to go if we

NOTE Confidence: 0.8438143

00:48:55.787 --> 00:48:58.088 switch gears and talk a little bit

NOTE Confidence: 0.8438143

00:48:58.088 --> 00:49:00.620 about TBI we see a high prevalence or

NOTE Confidence: 0.8438143

00:49:00.620 --> 00:49:02.480 high rates of traumatic brain injury.

NOTE Confidence: 0.8438143

00:49:02.480 --> 00:49:04.916 In our service members over the years,

NOTE Confidence: 0.8438143

00:49:04.920 --> 00:49:06.960 rising and probably kind of dropping

NOTE Confidence: 0.8438143

00:49:06.960 --> 00:49:09.772 down now that we're not having as many

NOTE Confidence: 0.8438143

00:49:09.772 --> 00:49:12.220 active combat operations in the Middle East,

NOTE Confidence: 0.8438143

00:49:12.220 --> 00:49:14.308 most of these are mild TBI

NOTE Confidence: 0.8438143

00:49:14.308 --> 00:49:15.352 cases like concussion.

NOTE Confidence: 0.8438143

00:49:15.360 --> 00:49:17.536 These are folks that drove by an ID

NOTE Confidence: 0.8438143

00:49:17.536 --> 00:49:20.229 and there was blast trauma to varying

NOTE Confidence: 0.8438143

00:49:20.229 --> 00:49:22.314 degrees and experienced concussive force.

NOTE Confidence: 0.79633576

00:49:24.340 --> 00:49:25.870 That we've seen in our,

NOTE Confidence: 0.79633576

00:49:25.870 --> 00:49:27.700 there's been a number of authors.

NOTE Confidence: 0.79633576

00:49:27.700 --> 00:49:30.140 Doctor castrated, I think is at USC now.

NOTE Confidence: 0.79633576

00:49:30.140 --> 00:49:32.036 Has written some really great papers

NOTE Confidence: 0.79633576

00:49:32.036 --> 00:49:34.100 about the impact of TBI on sleep.

NOTE Confidence: 0.79633576

00:49:34.100 --> 00:49:35.822 When you think about moderate and

NOTE Confidence: 0.79633576

00:49:35.822 --> 00:49:38.303 severe TBI and what you might see in

NOTE Confidence: 0.79633576

00:49:38.303 --> 00:49:39.898 folks with penetrating brain injury,

NOTE Confidence: 0.79633576

00:49:39.900 --> 00:49:41.550 there's definitely an impact of

NOTE Confidence: 0.79633576

00:49:41.550 --> 00:49:42.870 sleep disordered breathing and

NOTE Confidence: 0.79633576

00:49:42.870 --> 00:49:44.461 other sleep disorders on neuro

NOTE Confidence: 0.79633576

00:49:44.461 --> 00:49:46.267 recovery in patients with more severe

NOTE Confidence: 0.79633576

00:49:46.322 --> 00:49:47.828 forms of TBI in our population,

NOTE Confidence: 0.79633576

00:49:47.830 --> 00:49:48.760 what we found,

NOTE Confidence: 0.79633576

00:49:48.760 --> 00:49:51.296 you know in mostly in a population that

NOTE Confidence: 0.79633576

00:49:51.296 --> 00:49:53.672 has mild TBI and hence well enough to

NOTE Confidence: 0.79633576

00:49:53.672 --> 00:49:55.878 make it into a sleep clinic visit.

NOTE Confidence: 0.79633576

00:49:55.880 --> 00:49:58.211 Is a ton of insomnia and it's hard to

NOTE Confidence: 0.79633576

00:49:58.211 --> 00:50:00.398 study at this population in terms of.

NOTE Confidence: 0.79633576

00:50:00.400 --> 00:50:02.645 Control trial or making comparisons

NOTE Confidence: 0.79633576

00:50:02.645 --> 00:50:05.407 because they're universally on a ton

NOTE Confidence: 0.79633576

00:50:05.407 --> 00:50:07.203 of psychoactive medications that

NOTE Confidence: 0.79633576

00:50:07.203 --> 00:50:09.448 make it really challenging too.

NOTE Confidence: 0.79633576

00:50:09.450 --> 00:50:09.811 I'm.

NOTE Confidence: 0.79633576

00:50:09.811 --> 00:50:12.338 Do a better job assessing the sleep

NOTE Confidence: 0.79633576

00:50:12.338 --> 00:50:14.880 complaint in how much TV is playing a

NOTE Confidence: 0.79633576

00:50:14.880 --> 00:50:17.760 role as opposed to medication side effects.

NOTE Confidence: 0.79633576

00:50:17.760 --> 00:50:20.259 There's been a little bit of theoretical

NOTE Confidence: 0.79633576

00:50:20.259 --> 00:50:22.615 work on what the pathophysiology is

NOTE Confidence: 0.79633576

00:50:22.615 --> 00:50:25.443 of sleep disorders in folks with TBI.

NOTE Confidence: 0.79633576

00:50:25.450 --> 00:50:27.415 Certainly there's a potential for

NOTE Confidence: 0.79633576

00:50:27.415 --> 00:50:29.380 direct and indirect brain trauma

NOTE Confidence: 0.79633576

00:50:29.442 --> 00:50:32.196 and a reduction in weight promoting

NOTE Confidence: 0.79633576

00:50:32.196 --> 00:50:32.655 neurotransmitters.

NOTE Confidence: 0.79633576

00:50:32.660 --> 00:50:34.844 This isn't really my area of expertise.

NOTE Confidence: 0.79633576

00:50:34.850 --> 00:50:37.266 I do know that in folks with penetrating

NOTE Confidence: 0.79633576

00:50:37.266 --> 00:50:39.858 head trauma that blood in the cerebral space,

NOTE Confidence: 0.79633576

00:50:39.860 --> 00:50:41.570 if they've had a surgery where

NOTE Confidence: 0.79633576

00:50:41.570 --> 00:50:43.818 there was a lot of bleeding and

NOTE Confidence: 0.79633576

00:50:43.818 --> 00:50:45.900 aneurysmal repair that you can see

NOTE Confidence: 0.79633576

00:50:45.900 --> 00:50:47.680 folks that come out of that.

NOTE Confidence: 0.79633576

00:50:47.680 --> 00:50:49.276 With hypersomnia you can get a

NOTE Confidence: 0.79633576

00:50:49.276 --> 00:50:50.745 narcolepsy or a central hypersomnolence

NOTE Confidence: 0.79633576

00:50:50.745 --> 00:50:52.515 condition in relation to TBI

NOTE Confidence: 0.79633576

00:50:52.515 --> 00:50:53.931 for folks post operatively.

NOTE Confidence: 0.79633576

00:50:53.940 --> 00:50:56.210 Whether it's from penetrating neurotrauma

NOTE Confidence: 0.79633576

00:50:56.210 --> 00:50:59.136 or a traumatic surgery where there was

NOTE Confidence: 0.79633576

00:50:59.136 --> 00:51:01.930 a lot of blood in the Inter cranial vault.

NOTE Confidence: 0.79633576

00:51:01.930 --> 00:51:05.090 Suicide is what all kind of end with.

NOTE Confidence: 0.79633576

00:51:05.090 --> 00:51:07.197 And what we've if we think about?

NOTE Confidence: 0.79633576

00:51:07.200 --> 00:51:09.314 How do all these factors come together?

NOTE Confidence: 0.79633576

00:51:09.320 --> 00:51:10.830 If we're thinking about our

NOTE Confidence: 0.79633576

00:51:10.830 --> 00:51:12.340 veteran with PTSD and TBI,

NOTE Confidence: 0.79633576

00:51:12.340 --> 00:51:13.850 these are folks that may

NOTE Confidence: 0.79633576

00:51:13.850 --> 00:51:15.360 be a little more impulsive.

NOTE Confidence: 0.79633576

00:51:15.360 --> 00:51:16.568 They're chronically sleep deprived,

NOTE Confidence: 0.79633576

00:51:16.568 --> 00:51:18.078 which makes us more impulsive.

NOTE Confidence: 0.79633576

00:51:18.080 --> 00:51:20.770 We've seen this and sleep

NOTE Confidence: 0.79633576

00:51:20.770 --> 00:51:21.846 deprivation research.

NOTE Confidence: 0.79633576

00:51:21.850 --> 00:51:24.082 And folks that may be awake

NOTE Confidence: 0.79633576

00:51:24.082 --> 00:51:26.509 in the middle of the night.

NOTE Confidence: 0.79633576

00:51:26.510 --> 00:51:28.675 Hypervigilant and and having bad

NOTE Confidence: 0.79633576

00:51:28.675 --> 00:51:30.407 memories from things they've

NOTE Confidence: 0.79633576

00:51:30.407 --> 00:51:32.228 experienced in deployment and a

NOTE Confidence: 0.79633576

00:51:32.228 --> 00:51:33.878 lot of fear surrounding sleep.

NOTE Confidence: 0.79633576

00:51:33.880 --> 00:51:35.785 Oftentimes self treated with alcohol

NOTE Confidence: 0.79633576

00:51:35.785 --> 00:51:38.903 so it is not surprising that we see

NOTE Confidence: 0.79633576

00:51:38.903 --> 00:51:40.808 this kind of interaction between

NOTE Confidence: 0.79633576

00:51:40.808 --> 00:51:42.804 sleep disorders and alcohol use

NOTE Confidence: 0.79633576

00:51:42.804 --> 00:51:45.132 and circadian timing in a military

NOTE Confidence: 0.79633576

00:51:45.132 --> 00:51:47.455 population where most of the suicides

NOTE Confidence: 0.79633576

00:51:47.455 --> 00:51:48.616 are by firearms.

NOTE Confidence: 0.79633576

00:51:48.620 --> 00:51:51.056 Most of these suicides are happening

NOTE Confidence: 0.79633576

00:51:51.056 --> 00:51:53.272 early morning hours. Or later at night.

NOTE Confidence: 0.79633576

00:51:53.272 --> 00:51:55.254 So when people are at their circadian

NOTE Confidence: 0.79633576

00:51:55.254 --> 00:51:57.010 nadir and potentially intoxicated

NOTE Confidence: 0.79633576

00:51:57.010 --> 00:51:57.888 with alcohol.

NOTE Confidence: 0.79633576

00:51:57.890 --> 00:51:59.106 So you're you know,

NOTE Confidence: 0.79633576

00:51:59.106 --> 00:52:00.626 lowest amount of resilience in

NOTE Confidence: 0.79633576

00:52:00.626 --> 00:52:02.179 terms of cognitive function.

NOTE Confidence: 0.79633576

00:52:02.180 --> 00:52:04.022 No good decisions are made at

NOTE Confidence: 0.79633576

00:52:04.022 --> 00:52:06.139 two or three in the morning.

NOTE Confidence: 0.79633576

00:52:06.140 --> 00:52:07.790 I think anyone you know,

NOTE Confidence: 0.79633576

00:52:07.790 --> 00:52:10.100 a resident after cross Country knows that,

NOTE Confidence: 0.79633576

00:52:10.100 --> 00:52:12.256 but these are kind of a bunch

NOTE Confidence: 0.79633576

00:52:12.256 --> 00:52:14.388 of factors that come together to

NOTE Confidence: 0.79633576

00:52:14.388 --> 00:52:16.650 really increase the risk of suicide

NOTE Confidence: 0.79633576

00:52:16.650 --> 00:52:18.129 in our population.

NOTE Confidence: 0.890577368421052

00:52:18.130 --> 00:52:20.650 With that I know I only have 5

NOTE Confidence: 0.890577368421052

00:52:20.650 --> 00:52:23.020 minutes left and so sorry for going

NOTE Confidence: 0.890577368421052

00:52:23.020 --> 00:52:25.095 over a little bit, but please let

NOTE Confidence: 0.890577368421052

00:52:25.095 --> 00:52:26.810 me know if you have any questions.

NOTE Confidence: 0.8653462

00:52:28.580 --> 00:52:29.984 Thank you so much.

NOTE Confidence: 0.8653462

00:52:29.984 --> 00:52:32.512 That was a wonderful talk doctor Colin

NOTE Confidence: 0.8653462

00:52:32.512 --> 00:52:34.618 and just really a great overview

NOTE Confidence: 0.8653462

00:52:34.618 --> 00:52:37.050 of all these specific disorders.

NOTE Confidence: 0.8653462

00:52:37.050 --> 00:52:39.594 I have a question and there was a

NOTE Confidence: 0.8653462

00:52:39.594 --> 00:52:42.389 question in the chat related to the

NOTE Confidence: 0.8653462

00:52:42.389 --> 00:52:44.963 disability ratings that you alluded to

NOTE Confidence: 0.8653462

00:52:44.963 --> 00:52:47.447 for military members with sleep apnea.

NOTE Confidence: 0.8653462

00:52:47.450 --> 00:52:48.786 So my question is,

NOTE Confidence: 0.8653462

00:52:48.786 --> 00:52:51.762 you want to sing a little bit about

NOTE Confidence: 0.8653462

00:52:51.762 --> 00:52:53.987 what goes into that evaluation?

NOTE Confidence: 0.8653462

00:52:53.990 --> 00:52:56.438 As far as the temporal relationship

NOTE Confidence: 0.8653462

00:52:56.438 --> 00:52:58.729 between the onset of the OSA?

NOTE Confidence: 0.8653462

00:52:58.730 --> 00:53:01.866 Um and their military time and kind

NOTE Confidence: 0.8653462

00:53:01.866 --> 00:53:05.525 of how that decision is made that

NOTE Confidence: 0.8653462

00:53:05.525 --> 00:53:08.843 we decide this is service connected.

NOTE Confidence: 0.8653462

00:53:08.850 --> 00:53:11.430 And then the question from Amit

NOTE Confidence: 0.8653462

00:53:11.430 --> 00:53:14.381 Khanna and the chat was whether

NOTE Confidence: 0.8653462

00:53:14.381 --> 00:53:16.673 compliance with CPAP therapy

NOTE Confidence: 0.8653462

00:53:16.673 --> 00:53:18.965 impact that the disability,

NOTE Confidence: 0.8653462

00:53:18.970 --> 00:53:21.500 I guess payouts or rating.

NOTE Confidence: 0.836793572

00:53:22.770 --> 00:53:23.781 Great yeah so.

NOTE Confidence: 0.836793572

00:53:23.781 --> 00:53:25.803 This is definitely a phenomenon when

NOTE Confidence: 0.836793572

00:53:25.803 --> 00:53:28.060 people are separating from the service,

NOTE Confidence: 0.836793572

00:53:28.060 --> 00:53:29.164 especially my physician colleagues

NOTE Confidence: 0.836793572

00:53:29.164 --> 00:53:30.820 when they're about to retire there,

NOTE Confidence: 0.836793572

00:53:30.820 --> 00:53:33.012 like I need to get my sleep study

NOTE Confidence: 0.836793572

00:53:33.012 --> 00:53:34.689 'cause I'm about to get out,

NOTE Confidence: 0.836793572

00:53:34.690 --> 00:53:36.685 and I went to my retirement briefing

NOTE Confidence: 0.836793572

00:53:36.685 --> 00:53:38.942 and they said you gotta get your your

NOTE Confidence: 0.836793572

00:53:38.942 --> 00:53:41.129 sleep study so there is a big push

NOTE Confidence: 0.836793572

00:53:41.129 --> 00:53:42.963 to get it done before you separate,

NOTE Confidence: 0.836793572

00:53:42.970 --> 00:53:44.512 otherwise you end up with folks

NOTE Confidence: 0.836793572

00:53:44.512 --> 00:53:46.000 that are beneficiaries or veterans.

NOTE Confidence: 0.836793572

00:53:46.000 --> 00:53:46.906 Now coming back.

NOTE Confidence: 0.836793572

00:53:46.906 --> 00:53:48.718 That will sometimes say I need

NOTE Confidence: 0.836793572

00:53:48.718 --> 00:53:50.472 you to write a memo memo for

NOTE Confidence: 0.836793572

00:53:50.472 --> 00:53:52.348 me from you as a sleep doctor.

NOTE Confidence: 0.836793572

00:53:52.350 --> 00:53:54.734 Saying that you think that my sleep apnea

NOTE Confidence: 0.836793572

00:53:54.734 --> 00:53:56.976 curd like while I was on active duty,

NOTE Confidence: 0.836793572

00:53:56.980 --> 00:53:58.756 which there's no way you can,

NOTE Confidence: 0.836793572

00:53:58.760 --> 00:54:00.839 you can say, but in some cases,

NOTE Confidence: 0.836793572

00:54:00.840 --> 00:54:02.330 if you're desperate enough to

NOTE Confidence: 0.836793572

00:54:02.330 --> 00:54:04.455 get this person away from you or

NOTE Confidence: 0.836793572

00:54:04.455 --> 00:54:05.890 or they are persistent enough.

NOTE Confidence: 0.836793572

00:54:05.890 --> 00:54:07.370 I've been pushed into it,

NOTE Confidence: 0.836793572

00:54:07.370 --> 00:54:08.558 especially as a trainee,

NOTE Confidence: 0.836793572

00:54:08.558 --> 00:54:10.340 and it's tough because we want

NOTE Confidence: 0.836793572

00:54:10.395 --> 00:54:11.527 to help our veterans,

NOTE Confidence: 0.836793572

00:54:11.530 --> 00:54:13.015 but it's kinda dicey issue

NOTE Confidence: 0.836793572

00:54:13.015 --> 00:54:14.203 in terms of compliance.

NOTE Confidence: 0.836793572

00:54:14.210 --> 00:54:15.866 I've heard mixed things I've heard

NOTE Confidence: 0.836793572

00:54:15.866 --> 00:54:18.075 from some VA folks that if they've

NOTE Confidence: 0.836793572

00:54:18.075 --> 00:54:19.820 been prescribed CPAP and there's

NOTE Confidence: 0.836793572

00:54:19.820 --> 00:54:21.323 been documentation that they were

NOTE Confidence: 0.836793572

00:54:21.323 --> 00:54:22.817 using it at some point like,

NOTE Confidence: 0.836793572

00:54:22.820 --> 00:54:25.109 then that fits the bill and others.

NOTE Confidence: 0.836793572

00:54:25.110 --> 00:54:27.138 Where they're required to demonstrate an

NOTE Confidence: 0.836793572

00:54:27.138 --> 00:54:29.667 updated like 30 months of 30 day compliance.

NOTE Confidence: 0.836793572

00:54:29.670 --> 00:54:31.885 So when I'm seeing people

NOTE Confidence: 0.836793572

00:54:31.885 --> 00:54:34.510 for they go to the VA.

NOTE Confidence: 0.836793572

00:54:34.510 --> 00:54:35.863 Really wanting documentation

NOTE Confidence: 0.836793572

00:54:35.863 --> 00:54:38.118 that they were compliant and

NOTE Confidence: 0.836793572

00:54:38.118 --> 00:54:40.136 prescribed CPAP and nobody takes

NOTE Confidence: 0.836793572

00:54:40.136 --> 00:54:42.236 an oral appliance because of this.

NOTE Confidence: 0.836793572

00:54:42.240 --> 00:54:42.646 Yeah,

NOTE Confidence: 0.836793572

00:54:42.646 --> 00:54:43.868 so I have.

NOTE Confidence: 0.836793572

00:54:43.868 --> 00:54:46.724 I have a question that was a

NOTE Confidence: 0.836793572

00:54:46.724 --> 00:54:47.540 terrific presentation.

NOTE Confidence: 0.836793572

00:54:47.540 --> 00:54:50.319 One of the things I was always

NOTE Confidence: 0.836793572

00:54:50.319 --> 00:54:52.436 impressed when when seeing female

NOTE Confidence: 0.836793572

00:54:52.436 --> 00:54:55.383 patients at the VA for insomnia is

NOTE Confidence: 0.836793572

00:54:55.383 --> 00:54:58.219 that almost all of them had been

NOTE Confidence: 0.836793572

00:54:58.219 --> 00:55:01.010 raped while they were in the military.

NOTE Confidence: 0.836793572

00:55:01.010 --> 00:55:05.299 Has that been looked at systematically?

NOTE Confidence: 0.836793572

00:55:05.300 --> 00:55:05.653 Yes,

NOTE Confidence: 0.836793572

00:55:05.653 --> 00:55:08.477 and I'm not in an expert on it,

NOTE Confidence: 0.836793572

00:55:08.480 --> 00:55:10.699 but it's a huge issue in the

NOTE Confidence: 0.836793572

00:55:10.699 --> 00:55:12.379 military that's that's been studied

NOTE Confidence: 0.836793572

00:55:12.379 --> 00:55:14.689 and we have to do online trainings

NOTE Confidence: 0.836793572

00:55:14.689 --> 00:55:16.675 about sexual harassment and sexual

NOTE Confidence: 0.836793572

00:55:16.675 --> 00:55:19.063 assault and warning signs of sexual

NOTE Confidence: 0.836793572

00:55:19.070 --> 00:55:21.188 assault an from being on deployment.

NOTE Confidence: 0.836793572

00:55:21.190 --> 00:55:24.158 I can tell you that it's it

NOTE Confidence: 0.836793572

00:55:24.158 --> 00:55:26.919 is a very big problem.

NOTE Confidence: 0.836793572

00:55:26.920 --> 00:55:29.362 And even on some of the

NOTE Confidence: 0.836793572

00:55:29.362 --> 00:55:31.420 larger bases where there are.

NOTE Confidence: 0.836793572

00:55:31.420 --> 00:55:33.429 I remember when I was deployed to

NOTE Confidence: 0.836793572

00:55:33.429 --> 00:55:35.055 Afghanistan there were some sexual

NOTE Confidence: 0.836793572

00:55:35.055 --> 00:55:37.179 assaults that occurred in the women's

NOTE Confidence: 0.836793572

00:55:37.179 --> 00:55:38.454 bathroom facilities because they

NOTE Confidence: 0.836793572

00:55:38.454 --> 00:55:40.502 were unlocked and we run a NATO bassi

NOTE Confidence: 0.836793572

00:55:40.510 --> 00:55:42.926 of service members from all over the world.

NOTE Confidence: 0.836793572

00:55:42.930 --> 00:55:47.060 So you have like from different countries.

NOTE Confidence: 0.836793572

00:55:47.060 --> 00:55:49.045 Both American troops committing these

NOTE Confidence: 0.836793572

00:55:49.045 --> 00:55:51.330 acts and and foreign services too.

NOTE Confidence: 0.836793572

00:55:51.330 --> 00:55:52.890 And it's an issue in Garrison,

NOTE Confidence: 0.836793572

00:55:52.890 --> 00:55:53.670 like on base.

NOTE Confidence: 0.836793572

00:55:53.670 --> 00:55:54.970 You know not just deployed,

NOTE Confidence: 0.836793572

00:55:54.970 --> 00:55:57.050 but it's a huge issue in the military.

NOTE Confidence: 0.93621933

00:55:59.260 --> 00:56:02.100 Thank you. It's one of those things

NOTE Confidence: 0.93621933

00:56:02.100 --> 00:56:03.961 like weapons in the bedroom if you

NOTE Confidence: 0.93621933

00:56:03.961 --> 00:56:05.648 ask about it and not just female,

NOTE Confidence: 0.93621933

00:56:05.650 --> 00:56:06.925 but also Mail service members

NOTE Confidence: 0.93621933

00:56:06.925 --> 00:56:08.200 that it's a big issue.

NOTE Confidence: 0.93621933

00:56:08.200 --> 00:56:09.694 It's a bigger issue than people

NOTE Confidence: 0.93621933

00:56:09.694 --> 00:56:11.259 realize with male service members too,

NOTE Confidence: 0.93621933

00:56:11.260 --> 00:56:13.400 unfortunately.

NOTE Confidence: 0.93621933

00:56:13.400 --> 00:56:15.519 Jacob, this is Stuart man from

NOTE Confidence: 0.82072276

00:56:15.520 --> 00:56:17.041 Pacific Sleep Medicine.

NOTE Confidence: 0.82072276

00:56:17.041 --> 00:56:19.069 Thank you so much.

NOTE Confidence: 0.82072276

00:56:19.070 --> 00:56:21.730 You know, do you have a problem?

NOTE Confidence: 0.82072276

00:56:21.730 --> 00:56:25.658 I ask patients what time they get up.

NOTE Confidence: 0.82072276

00:56:25.660 --> 00:56:27.454 This is the Marines and they'll

NOTE Confidence: 0.82072276

00:56:27.454 --> 00:56:29.550 often say like 5 in the morning,

NOTE Confidence: 0.82072276

00:56:29.550 --> 00:56:30.742 although they don't have

NOTE Confidence: 0.82072276

00:56:30.742 --> 00:56:31.934 to report until seven.

NOTE Confidence: 0.82072276

00:56:31.934 --> 00:56:34.330 I said why you getting up at 5:00

NOTE Confidence: 0.82072276

00:56:34.330 --> 00:56:36.126 and they said they get their

NOTE Confidence: 0.82072276

00:56:36.126 --> 00:56:37.920 exercise during that period of time.

NOTE Confidence: 0.82072276

00:56:37.920 --> 00:56:39.600 Is that encouraged to get exercise

NOTE Confidence: 0.82072276

00:56:39.600 --> 00:56:41.210 that early in the morning?

NOTE Confidence: 0.8594968

00:56:42.170 --> 00:56:44.487 It is. It's so counterproductive in terms

NOTE Confidence: 0.8594968

00:56:44.487 --> 00:56:46.266 of like athletic performance literature

NOTE Confidence: 0.8594968

00:56:46.266 --> 00:56:49.150 where we know that like your peak, physical

NOTE Confidence: 0.8594968

00:56:49.150 --> 00:56:50.900 performance is probably late afternoon.

NOTE Confidence: 0.8594968

00:56:50.900 --> 00:56:52.640 You know whether it's powerlifting,

NOTE Confidence: 0.8594968

00:56:52.640 --> 00:56:55.174 sprinting or whatever you think of like

NOTE Confidence: 0.8594968

00:56:55.174 --> 00:56:57.584 your best performance for any sport is

NOTE Confidence: 0.8594968

00:56:57.584 --> 00:56:59.270 late afternoon, early evening, from.

NOTE Confidence: 0.8594968

00:56:59.270 --> 00:57:00.670 From what I've read.

NOTE Confidence: 0.8594968

00:57:00.670 --> 00:57:03.106 But there's this culture in the military.

NOTE Confidence: 0.8594968

00:57:03.110 --> 00:57:06.242 Hey, we get up and we do our PT,

NOTE Confidence: 0.8594968

00:57:06.250 --> 00:57:09.435 you know before the day starts and.

NOTE Confidence: 0.8594968

00:57:09.440 --> 00:57:10.964 And if you're on any military

NOTE Confidence: 0.8594968

00:57:10.964 --> 00:57:11.980 base around the country,

NOTE Confidence: 0.8594968

00:57:11.980 --> 00:57:13.200 you'll see platoons of soldiers

NOTE Confidence: 0.8594968

00:57:13.200 --> 00:57:15.029 out running at 5-6 in the morning,

NOTE Confidence: 0.8594968

00:57:15.030 --> 00:57:16.295 and then they usually afterwards

NOTE Confidence: 0.8594968

00:57:16.295 --> 00:57:17.568 they go shower, get breakfast,

NOTE Confidence: 0.8594968

00:57:17.568 --> 00:57:18.838 and then they kind of.

NOTE Confidence: 0.8594968

00:57:18.840 --> 00:57:20.358 They actually go into the office,

NOTE Confidence: 0.8594968

00:57:20.360 --> 00:57:21.068 so to speak.

NOTE Confidence: 0.8594968

00:57:21.068 --> 00:57:22.720 It you know nine 9:30 and then

NOTE Confidence: 0.8594968

00:57:22.780 --> 00:57:24.430 even once they're out of that,

NOTE Confidence: 0.8594968

00:57:24.430 --> 00:57:25.700 and they're not required to.

NOTE Confidence: 0.8594968

00:57:25.700 --> 00:57:28.240 They kind of just got into the habit of it,

NOTE Confidence: 0.8594968

00:57:28.240 --> 00:57:29.510 where they still do it.

NOTE Confidence: 0.848663899999999

00:57:31.160 --> 00:57:34.004 Great, thank you I think will end there and

NOTE Confidence: 0.848663899999999

00:57:34.004 --> 00:57:36.468 thank you again so much for a fantastic

NOTE Confidence: 0.848663899999999

00:57:36.468 --> 00:57:39.243 talk take of an and then just to let

NOTE Confidence: 0.848663899999999

00:57:39.243 --> 00:57:41.222 everybody know our talk for next week.

NOTE Confidence: 0.848663899999999

00:57:41.222 --> 00:57:43.405 We're going to have a talk by Jason

NOTE Confidence: 0.848663899999999

00:57:43.405 --> 00:57:45.481 Ellis who's a professor of psychology

NOTE Confidence: 0.848663899999999

00:57:45.481 --> 00:57:47.534 and the director of the Northumbria

NOTE Confidence: 0.848663899999999

00:57:47.534 --> 00:57:49.753 Center for Sleep Research in the UK.

NOTE Confidence: 0.848663899999999

00:57:49.760 --> 00:57:51.620 He's going to be speaking about,

NOTE Confidence: 0.848663899999999

00:57:51.620 --> 00:57:53.790 well is talk, is titled Wind Asleep,

NOTE Confidence: 0.848663899999999

00:57:53.790 --> 00:57:55.680 Become the enemy and I believe

NOTE Confidence: 0.848663899999999

00:57:55.680 --> 00:57:57.649 he's going to speak about acute

NOTE Confidence: 0.848663899999999

00:57:57.649 --> 00:57:59.896 insomnia so please join us for that

NOTE Confidence: 0.848663899999999

00:57:59.896 --> 00:58:01.985 and I'll see you all next week.

NOTE Confidence: 0.848663899999999

00:58:01.990 --> 00:58:02.690 Take care.

NOTE Confidence: 0.8625444

00:58:04.820 --> 00:58:05.988 Thanks for having me.

NOTE Confidence: 0.8625444

00:58:05.990 --> 00:58:07.046 Thanks again. Take care.

NOTE Confidence: 0.8625444

00:58:07.046 --> 00:58:09.007 I'll see you on the next committee

NOTE Confidence: 0.8625444

00:58:09.007 --> 00:58:11.268 call and whenever there's a few weeks.

NOTE Confidence: 0.8988711

00:58:12.960 --> 00:58:13.620 Take care.