



1  
00:00:00,600 --> 00:00:09,530

[Music]

2  
00:00:19,109 --> 00:00:13,789

by some sort of serendipity or

3  
00:00:21,359 --> 00:00:19,119

synchronicity what's been on my mind the

4  
00:00:24,600 --> 00:00:21,369

last year or two happens to fit

5  
00:00:29,089 --> 00:00:24,610

perfectly into the theme of this

6  
00:00:33,840 --> 00:00:29,099

conference of challenging mainstream

7  
00:00:37,170 --> 00:00:33,850

paradigms and my challenge is to the

8  
00:00:42,690 --> 00:00:37,180

routine treatment of chronic diseases

9  
00:00:47,279 --> 00:00:42,700

with drugs which focuses on symptoms

10  
00:00:50,959 --> 00:00:47,289

instead of causes and it really reflects

11  
00:00:54,619 --> 00:00:50,969

an unwitting unspoken implicit

12  
00:01:00,540 --> 00:00:54,629

assumption that we can extend lifespan

13  
00:01:02,389 --> 00:01:00,550

indefinitely by administering drugs so

14

00:01:05,550 --> 00:01:02,399

I've called this seeking immortality

15

00:01:11,370 --> 00:01:05,560

with a question mark not a cold and as

16

00:01:14,550 --> 00:01:11,380

in the as in the program and some of the

17

00:01:19,710 --> 00:01:14,560

statements I make may strike you as

18

00:01:22,400 --> 00:01:19,720

maybe a bit excessive overblown in fact

19

00:01:28,100 --> 00:01:22,410

I'll be a bit disappointed if they don't

20

00:01:37,520 --> 00:01:28,110

but everything I say is based on

21

00:01:42,859 --> 00:01:37,530

mainstream documentation and on my

22

00:01:47,510 --> 00:01:42,869

website there's a PDF you can download

23

00:01:52,400 --> 00:01:47,520

what's wrong with with medicine that has

24

00:01:58,800 --> 00:01:52,410

dozens of books a number of articles

25

00:02:02,130 --> 00:01:58,810

some official reports all of which state

26

00:02:07,199 --> 00:02:02,140

or document what I'm about to tell you

27

00:02:14,280 --> 00:02:07,209

and in fact I think this is more a

28

00:02:25,110 --> 00:02:21,119

when when we don't feel well it's for

29

00:02:28,559 --> 00:02:25,120

broadly one of two reasons either we've

30

00:02:32,479 --> 00:02:28,569

been attacked from outside in which case

31

00:02:36,949 --> 00:02:32,489

we talk about an infectious disease or

32

00:02:40,170 --> 00:02:36,959

there's some sort of malfunction inside

33

00:02:43,259 --> 00:02:40,180

ourselves there's a chronic disease like

34

00:02:47,850 --> 00:02:43,269

heart disease or cancer or arthritis

35

00:02:52,259 --> 00:02:47,860

that sort of thing those are two very

36

00:02:54,960 --> 00:02:52,269

different ways of getting to feel ill so

37

00:03:00,839 --> 00:02:54,970

you might think that we ought to treat

38

00:03:05,670 --> 00:03:00,849

them differently but we don't current

39

00:03:08,520 --> 00:03:05,680

practice is in both cases to attempt to

40

00:03:12,869 --> 00:03:08,530

treat them with drugs which are

41

00:03:21,210 --> 00:03:12,879

supposedly specific and do only what we

42

00:03:26,099 --> 00:03:21,220

want them to do when it in the case of

43

00:03:31,379 --> 00:03:26,109

an infectious disease we can identify a

44

00:03:35,809 --> 00:03:31,389

specific cause of illness not only that

45

00:03:38,039 --> 00:03:35,819

but bacteria and parasites have

46

00:03:42,750 --> 00:03:38,049

physiologies that are sufficiently

47

00:03:46,110 --> 00:03:42,760

different from our physiology that we

48

00:03:50,339 --> 00:03:46,120

can find we have found substances that

49

00:03:53,280 --> 00:03:50,349

can kill them differentially kill them

50

00:03:59,610 --> 00:03:53,290

without killing us at least sufficiently

51  
00:04:04,110 --> 00:03:59,620  
differently and what's more to get over

52  
00:04:07,819 --> 00:04:04,120  
an infectious disease we usually have to

53  
00:04:15,150 --> 00:04:07,829  
take a drug for a limited period of time

54  
00:04:18,240 --> 00:04:15,160  
by contrast groups in the case of the

55  
00:04:22,770 --> 00:04:18,250  
malfunction inside of chronic disease

56  
00:04:27,000 --> 00:04:22,780  
there is no specific identifiable cause

57  
00:04:30,660 --> 00:04:27,010  
no single cause it's a

58  
00:04:35,550 --> 00:04:30,670  
systemic disturbance and the question is

59  
00:04:39,060 --> 00:04:35,560  
if you want to cure that it means

60  
00:04:43,830 --> 00:04:39,070  
restoring homeostasis which refers to

61  
00:04:46,770 --> 00:04:43,840  
the fact that our bodies manage to

62  
00:04:49,980 --> 00:04:46,780  
function in a stable way a reasonably

63  
00:04:52,650 --> 00:04:49,990

stable way even though they're immensely

64

00:04:56,280 --> 00:04:52,660

complicated systems there are

65

00:04:59,640 --> 00:04:56,290

innumerable reactions going on all the

66

00:05:03,200 --> 00:04:59,650

time those reactions are switched on and

67

00:05:07,080 --> 00:05:03,210

off by signals that go back and forth

68

00:05:11,010 --> 00:05:07,090

there's feedback all the time and it's

69

00:05:13,470 --> 00:05:11,020

an intensely complex system where it

70

00:05:16,590 --> 00:05:13,480

doesn't seem rational to think that when

71

00:05:19,320 --> 00:05:16,600

you that you can fix something wrong

72

00:05:22,770 --> 00:05:19,330

with that system just by adding one

73

00:05:27,390 --> 00:05:22,780

substance what's more if it's a chronic

74

00:05:34,320 --> 00:05:27,400

disease we are being administered drugs

75

00:05:37,520 --> 00:05:34,330

for lifelong use and in that case our

76

00:05:41,190 --> 00:05:37,530

systems are also being affected by the

77

00:05:45,960 --> 00:05:41,200

cumulative effects of the so called

78

00:05:48,780 --> 00:05:45,970

side effects now when I say that there's

79

00:05:56,730 --> 00:05:48,790

no specific identifiable cause of

80

00:06:02,340 --> 00:05:56,740

illness current theory is that cancer

81

00:06:05,610 --> 00:06:02,350

for example requires several steps to

82

00:06:08,940 --> 00:06:05,620

occur and no single one of those is

83

00:06:13,070 --> 00:06:08,950

decisive not a single one alone will

84

00:06:16,230 --> 00:06:13,080

cause the cancer as far as heart disease

85

00:06:19,530 --> 00:06:16,240

cardiovascular disease goes the

86

00:06:26,030 --> 00:06:19,540

Institute of Medicine mentions that

87

00:06:31,230 --> 00:06:26,040

there are 243 risk factors for that

88

00:06:37,380 --> 00:06:31,240

so there's obviously no way in which you

89

00:06:39,490 --> 00:06:37,390

can treat 243 different risks certainly

90

00:06:43,149 --> 00:06:39,500

not with drugs

91

00:06:45,830 --> 00:06:43,159

so having said that there's no single

92

00:06:48,980 --> 00:06:45,840

identifiable cause of chronic disease

93

00:06:53,950 --> 00:06:48,990

I'm going to tell you that there is a

94

00:07:02,960 --> 00:06:53,960

single clear cause of chronic disease

95

00:07:08,839 --> 00:07:02,970

it's getting older if someone dies from

96

00:07:10,969 --> 00:07:08,849

heart disease from cancer what does the

97

00:07:14,149 --> 00:07:10,979

death certificate say what do we say

98

00:07:18,640 --> 00:07:14,159

about it we say this person died from

99

00:07:27,050 --> 00:07:22,670

so the thought that we can prevent organ

100

00:07:30,680 --> 00:07:27,060

failure or cancer amounts to saying that

101  
00:07:35,290 --> 00:07:30,690  
we can prevent aging and that's why I

102  
00:07:38,059 --> 00:07:35,300  
chose the title seeking immortality

103  
00:07:42,230 --> 00:07:38,069  
that's implicitly what we are doing

104  
00:07:46,670 --> 00:07:42,240  
without of course admitting it and one

105  
00:07:50,269 --> 00:07:46,680  
way of disguising that fact is to

106  
00:07:58,040 --> 00:07:50,279  
describe getting older as though it were

107  
00:08:01,100 --> 00:07:58,050  
an illness we use semantics normal

108  
00:08:05,390 --> 00:08:01,110  
changes with age are described as

109  
00:08:09,290 --> 00:08:05,400  
abnormal we don't talk about our hearts

110  
00:08:12,830 --> 00:08:09,300  
and arteries getting older we say we've

111  
00:08:15,860 --> 00:08:12,840  
got cardiovascular disease as though it

112  
00:08:20,769 --> 00:08:15,870  
were the same sort of thing as when we

113  
00:08:25,899 --> 00:08:20,779

get the flu we talk about hypertension

114

00:08:29,659 --> 00:08:25,909

blood pressure too high pre hypertension

115

00:08:31,820 --> 00:08:29,669

you're not healed yet but you're going

116

00:08:34,750 --> 00:08:31,830

to be and I'm gonna say a lot more about

117

00:08:37,699 --> 00:08:34,760

blood pressure later we talk about

118

00:08:41,060 --> 00:08:37,709

pre-diabetes talked about high

119

00:08:43,219 --> 00:08:41,070

cholesterol and bad cholesterol when

120

00:08:46,430 --> 00:08:43,229

actually cholesterol is one of the

121

00:08:50,030 --> 00:08:46,440

substances our body makes because it

122

00:08:51,260 --> 00:08:50,040

needs the cholesterol the cholesterol is

123

00:08:56,440 --> 00:08:51,270

part of

124

00:09:00,470 --> 00:08:56,450

all of the cell membranes we talk about

125

00:09:06,230 --> 00:09:00,480

dysfunctions clearly things all of these

126  
00:09:08,890 --> 00:09:06,240  
things happen normally with age but we

127  
00:09:15,860 --> 00:09:08,900  
described them as though they were

128  
00:09:18,140 --> 00:09:15,870  
abnormalities so what I've said so far

129  
00:09:20,810 --> 00:09:18,150  
is is really based on first principles

130  
00:09:23,840 --> 00:09:20,820  
on first principles he wouldn't think

131  
00:09:27,410 --> 00:09:23,850  
that you could cure chronic diseases

132  
00:09:30,800 --> 00:09:27,420  
with drugs but we've been doing it we've

133  
00:09:33,350 --> 00:09:30,810  
been trying it for decades so there

134  
00:09:36,620 --> 00:09:33,360  
ought to be some evidence as to whether

135  
00:09:39,200 --> 00:09:36,630  
it works or not we've been taking blood

136  
00:09:41,900 --> 00:09:39,210  
pressure lowering medications and blood

137  
00:09:45,740 --> 00:09:41,910  
thinners and statins and the question is

138  
00:09:49,480 --> 00:09:45,750

have they improved the quality of life

139

00:09:53,030 --> 00:09:49,490

or have they extended useful lifespan

140

00:09:57,860 --> 00:09:53,040

how would you answer that question

141

00:10:01,420 --> 00:09:57,870

well you would have to take people pairs

142

00:10:04,370 --> 00:10:01,430

of people who have exactly the same

143

00:10:06,070 --> 00:10:04,380

condition and you would have to treat

144

00:10:08,600 --> 00:10:06,080

one of them and leave the other one

145

00:10:11,510 --> 00:10:08,610

untreated and they would also have to be

146

00:10:16,720 --> 00:10:11,520

matched for everything that could

147

00:10:20,740 --> 00:10:16,730

possibly be important like age sex

148

00:10:25,250 --> 00:10:20,750

genetic predisposition environment diet

149

00:10:30,350 --> 00:10:25,260

lifestyle it is impossible to do that

150

00:10:34,370 --> 00:10:30,360

sort of a clinical trial so what do we

151

00:10:37,580 --> 00:10:34,380

do we use so called biomarkers or

152

00:10:40,220 --> 00:10:37,590

surrogate markers we measure blood

153

00:10:43,970 --> 00:10:40,230

pressure we measure cholesterol level we

154

00:10:47,300 --> 00:10:43,980

measure blood sugar PSA and so on on the

155

00:10:51,110 --> 00:10:47,310

presumption that those things that we

156

00:10:53,840 --> 00:10:51,120

can measure are proper measures of the

157

00:10:57,080 --> 00:10:53,850

disease that we are trying or the

158

00:11:02,240 --> 00:10:57,090

condition that we are attempting to to

159

00:11:03,410 --> 00:11:02,250

follow well are the surrogate markers

160

00:11:06,880 --> 00:11:03,420

valid

161

00:11:09,650 --> 00:11:06,890

in order to find out whether any given

162

00:11:12,470 --> 00:11:09,660

surrogate marker is valid you would have

163

00:11:16,400 --> 00:11:12,480

to do exactly the sort of impossible

164

00:11:24,380 --> 00:11:16,410

clinical trial as you would have needed

165

00:11:27,590 --> 00:11:24,390

to test a drug so these biomarkers blood

166

00:11:31,910 --> 00:11:27,600

pressure cholesterol level and so on had

167

00:11:35,110 --> 00:11:31,920

been chosen because they have been found

168

00:11:39,440 --> 00:11:35,120

to be associated statistically

169

00:11:43,550 --> 00:11:39,450

correlated statistically with what we've

170

00:11:45,800 --> 00:11:43,560

called the disease now a statistical

171

00:11:54,940 --> 00:11:45,810

correlation may not be valid in

172

00:11:58,400 --> 00:11:54,950

individual cases the overall mortality

173

00:12:04,790 --> 00:11:58,410

increases as blood pressure increases

174

00:12:08,270 --> 00:12:04,800

but given individuals may thrive on

175

00:12:11,080 --> 00:12:08,280

blood pressure levels that are 50

176

00:12:14,290 --> 00:12:11,090

percent higher than the average the

177

00:12:18,170 --> 00:12:14,300

statistical correlation does not

178

00:12:21,260 --> 00:12:18,180

transfer over to any individual case but

179

00:12:24,380 --> 00:12:21,270

in any case all of these surrogate

180

00:12:29,570 --> 00:12:24,390

markers are based just on correlations

181

00:12:33,380 --> 00:12:29,580

and it's a fundamental fact of

182

00:12:38,300 --> 00:12:33,390

statistics and of common sense that

183

00:12:40,990 --> 00:12:38,310

correlation doesn't prove causation my

184

00:12:45,110 --> 00:12:41,000

favorite example of that comes from

185

00:12:48,410 --> 00:12:45,120

books 60 years ago by Darrell half how

186

00:12:51,440 --> 00:12:48,420

to lie with statistics and he mentions

187

00:12:54,070 --> 00:12:51,450

the correlation between the price of

188

00:12:59,390 --> 00:12:54,080

ramen Cuba and the salaries of

189

00:13:02,180 --> 00:12:59,400

Protestant ministers in Connecticut the

190

00:13:04,790 --> 00:13:02,190

question is is it the fact that those

191

00:13:09,190 --> 00:13:04,800

ministers salaries were going up that

192

00:13:13,400 --> 00:13:09,200

allowed Cuba to to ask more forum well

193

00:13:17,120 --> 00:13:13,410

obviously not the fact is that prices

194

00:13:20,120 --> 00:13:17,130

and salaries both increased with

195

00:13:25,160 --> 00:13:20,130

inflation and so there was a correlation

196

00:13:29,420 --> 00:13:25,170

between those two things we tend to

197

00:13:33,800 --> 00:13:29,430

believe that correlations show causes

198

00:13:36,560 --> 00:13:33,810

when it seems plausible but the evidence

199

00:13:42,830 --> 00:13:36,570

just the correlation doesn't prove the

200

00:13:46,690 --> 00:13:42,840

cause as we get older the incidence of

201  
00:13:49,970 --> 00:13:46,700  
cancer increases statistically speaking

202  
00:13:52,220 --> 00:13:49,980  
incidence of organ failures increases

203  
00:13:57,040 --> 00:13:52,230  
the incidence of heart attacks and

204  
00:14:00,500 --> 00:13:57,050  
strokes increases hearing deteriorate

205  
00:14:04,600 --> 00:14:00,510  
incidence of dementia increases blood

206  
00:14:07,460 --> 00:14:04,610  
pressure increases mortality increases

207  
00:14:12,080 --> 00:14:07,470  
all those things correlate with one

208  
00:14:18,080 --> 00:14:12,090  
another so does that mean that blood

209  
00:14:19,210 --> 00:14:18,090  
pressure causes cancer hearing loss the

210  
00:14:22,880 --> 00:14:19,220  
main TIA

211  
00:14:25,850 --> 00:14:22,890  
they're just correlations but not

212  
00:14:28,550 --> 00:14:25,860  
everybody seems to understand that about

213  
00:14:33,050 --> 00:14:28,560

six months ago there were some news

214

00:14:36,380 --> 00:14:33,060

items over about a research study which

215

00:14:38,360 --> 00:14:36,390

had found a correlation between hearing

216

00:14:42,200 --> 00:14:38,370

loss and de mentir

217

00:14:46,370 --> 00:14:42,210

and there was even speculation about why

218

00:14:51,470 --> 00:14:46,380

that might be as as it gets harder and

219

00:14:54,440 --> 00:14:51,480

harder to hear you stress your brain and

220

00:15:00,740 --> 00:14:54,450

you drive yourself nuts trying to

221

00:15:04,610 --> 00:15:00,750

understand what's being said shortly

222

00:15:08,480 --> 00:15:04,620

after that my local newspaper carried

223

00:15:12,710 --> 00:15:08,490

this full-page ad saying hearing loss

224

00:15:15,020 --> 00:15:12,720

and de mentir linked and of course they

225

00:15:17,810 --> 00:15:15,030

suggested that everyone should get their

226

00:15:19,880 --> 00:15:17,820

hearing tested and if there was any

227

00:15:22,580 --> 00:15:19,890

deficiency there they should get a

228

00:15:29,000 --> 00:15:22,590

hearing aid in order to stave off

229

00:15:33,780 --> 00:15:29,010

Alzheimer's disease that seems absurd

230

00:15:37,590 --> 00:15:33,790

but you see the evidence that high blood

231

00:15:41,790 --> 00:15:37,600

pressure causes cardiovascular disease

232

00:15:44,910 --> 00:15:41,800

is of exactly the same sort as the

233

00:15:47,610 --> 00:15:44,920

evidence that hearing loss causes demand

234

00:15:52,710 --> 00:15:47,620

here or that demand here causes hearing

235

00:15:58,470 --> 00:15:52,720

loss so the surrogate markers are simply

236

00:16:01,949 --> 00:15:58,480

not valid and I'm not the person who

237

00:16:04,829 --> 00:16:01,959

suggests that an Institute of Medicine

238

00:16:08,430 --> 00:16:04,839

report published in 2010 called the

239

00:16:13,010 --> 00:16:08,440

evaluation of biomarkers and surrogate

240

00:16:17,960 --> 00:16:13,020

endpoints in chronic disease actually

241

00:16:22,530 --> 00:16:17,970

amounts to an attempt to advise how to

242

00:16:24,930 --> 00:16:22,540

minimize the damage from using surrogate

243

00:16:27,650 --> 00:16:24,940

markers and they mentioned some

244

00:16:31,320 --> 00:16:27,660

surrogate markers that are not valid for

245

00:16:35,400 --> 00:16:31,330

example in the case of cancers it turns

246

00:16:39,690 --> 00:16:35,410

out that the size of a tumor is not a

247

00:16:44,780 --> 00:16:39,700

valid measure that tells you about the

248

00:16:47,730 --> 00:16:44,790

prognosis of what is likely to happen in

249

00:16:50,840 --> 00:16:47,740

cardiovascular disease believe it or not

250

00:16:54,990 --> 00:16:50,850

they the Institute of Medicine says

251  
00:16:57,540 --> 00:16:55,000  
blood pressure is not a valid marker of

252  
00:17:00,810 --> 00:16:57,550  
the progression of cardiovascular

253  
00:17:03,390 --> 00:17:00,820  
disease neither is cholesterol whether

254  
00:17:06,720 --> 00:17:03,400  
it's total or the so called bad

255  
00:17:09,660 --> 00:17:06,730  
cholesterol or the ratio neither is the

256  
00:17:15,020 --> 00:17:09,670  
c-reactive protein which has been in

257  
00:17:18,210 --> 00:17:15,030  
fashion or another substance troponin

258  
00:17:22,500 --> 00:17:18,220  
Javan an EDL in the British Medical

259  
00:17:26,490 --> 00:17:22,510  
Journal last year talked about the true

260  
00:17:29,190 --> 00:17:26,500  
cost of using drugs to prevent disease

261  
00:17:33,600 --> 00:17:29,200  
and they said flatly

262  
00:17:37,760 --> 00:17:33,610  
there are no valid data on the

263  
00:17:38,940 --> 00:17:37,770

effectiveness of statins

264

00:17:40,990 --> 00:17:38,950

antihypertensives

265

00:17:44,710 --> 00:17:41,000

and bisphosphonates

266

00:17:48,930 --> 00:17:44,720

be aimed at antihypertensives lower

267

00:17:54,540 --> 00:17:48,940

blood pressure bisphosphonates are what

268

00:17:59,740 --> 00:17:54,550

we get in order to stave off supposedly

269

00:18:02,980 --> 00:17:59,750

osteoporosis so I'm suggesting that the

270

00:18:07,600 --> 00:18:02,990

drug based treatment of chronic ailments

271

00:18:09,700 --> 00:18:07,610

is a fundamentally misguided approach it

272

00:18:13,630 --> 00:18:09,710

treats aging as though it were an

273

00:18:18,220 --> 00:18:13,640

illness the illness is assessed by

274

00:18:21,870 --> 00:18:18,230

surrogate markers drugs are approved on

275

00:18:25,330 --> 00:18:21,880

the basis of how they affect the

276

00:18:29,140 --> 00:18:25,340

surrogate markers and then we add to

277

00:18:35,680 --> 00:18:29,150

that the wrong presumption the drugs can

278

00:18:40,480 --> 00:18:35,690

be specific there are many sins in the

279

00:18:43,510 --> 00:18:40,490

approval process of drugs one of them is

280

00:18:46,180 --> 00:18:43,520

that in order to get a drug approved all

281

00:18:50,020 --> 00:18:46,190

you have to do is to submit to the

282

00:18:53,650 --> 00:18:50,030

Federal Drug Administration the results

283

00:18:57,520 --> 00:18:53,660

of two clinical trials which have lasted

284

00:18:59,860 --> 00:18:57,530

at least six months you don't have to

285

00:19:04,450 --> 00:18:59,870

tell them how many other trials you

286

00:19:08,520 --> 00:19:04,460

carried out that accelerated approval

287

00:19:14,320 --> 00:19:08,530

was brought in as a result of the panic

288

00:19:17,620 --> 00:19:14,330

over the AIDS epidemic when there was

289

00:19:21,460 --> 00:19:17,630

apparently no cure available but it has

290

00:19:24,450 --> 00:19:21,470

become routine one of the things that

291

00:19:27,640 --> 00:19:24,460

was supposed to be part of accelerated

292

00:19:28,420 --> 00:19:27,650

approval was that after a drug had been

293

00:19:30,940 --> 00:19:28,430

approved

294

00:19:34,750 --> 00:19:30,950

there should be continual monitoring of

295

00:19:37,660 --> 00:19:34,760

what it actually did in practice but

296

00:19:41,880 --> 00:19:37,670

there's been a thoroughgoing failure to

297

00:19:45,250 --> 00:19:41,890

do that and it turns out that about

298

00:19:51,280 --> 00:19:45,260

three-quarters of all drugs approved in

299

00:19:54,070 --> 00:19:51,290

this way have no data from follow-up and

300

00:20:03,360 --> 00:19:54,080

in fact there is no system

301  
00:20:12,070 --> 00:20:06,220  
doctors individual physicians of course

302  
00:20:17,520 --> 00:20:12,080  
are asked to report when they see that a

303  
00:20:20,140 --> 00:20:17,530  
particular drug has had a bad effect but

304  
00:20:23,610 --> 00:20:20,150  
individual doctors are given no

305  
00:20:29,350 --> 00:20:23,620  
guidelines for the various medications

306  
00:20:31,330 --> 00:20:29,360  
for what they should look for so you're

307  
00:20:33,910 --> 00:20:31,340  
a doctor you're treating someone for a

308  
00:20:36,310 --> 00:20:33,920  
particular condition you're using a drug

309  
00:20:39,850 --> 00:20:36,320  
that's been approved by the FDA

310  
00:20:42,490 --> 00:20:39,860  
you presume that it's working you find

311  
00:20:44,740 --> 00:20:42,500  
you you notice that the patient is not

312  
00:20:48,460 --> 00:20:44,750  
getting better maybe showing some other

313  
00:20:51,340 --> 00:20:48,470

symptoms the most natural thing for you

314

00:20:54,610 --> 00:20:51,350

to conclude is the drug isn't really

315

00:20:58,000 --> 00:20:54,620

helping the illness is getting worse but

316

00:21:01,090 --> 00:20:58,010

you don't immediately believe that maybe

317

00:21:05,320 --> 00:21:01,100

the drug is causing an additional

318

00:21:08,740 --> 00:21:05,330

problem so even if there were some sort

319

00:21:11,680 --> 00:21:08,750

of a system of reporting adverse events

320

00:21:14,860 --> 00:21:11,690

there is no guarantee that it would be

321

00:21:19,510 --> 00:21:14,870

could be efficient and in fact some

322

00:21:22,960 --> 00:21:19,520

observers have suggested that maybe 90%

323

00:21:26,830 --> 00:21:22,970

of the adverse effects of drugs are

324

00:21:29,290 --> 00:21:26,840

never reported to the authorities now

325

00:21:35,640 --> 00:21:29,300

those were sins of omission

326

00:21:42,540 --> 00:21:39,460

those two clinical trials on the basis

327

00:21:46,090 --> 00:21:42,550

of which the FDA may approve a drug and

328

00:21:49,440 --> 00:21:46,100

not of course the last data that we get

329

00:21:53,230 --> 00:21:49,450

about the effects of those drugs and

330

00:21:57,910 --> 00:21:53,240

John yo-yo our need is who has done a

331

00:22:04,650 --> 00:21:57,920

lot of statistical assessment of medical

332

00:22:06,159 --> 00:22:04,660

matters looked at the 35 most cited

333

00:22:10,989 --> 00:22:06,169

biomarker

334

00:22:16,959 --> 00:22:10,999

and he found that in only seven of those

335

00:22:20,409 --> 00:22:16,969

35 cases did later data confirmed what

336

00:22:25,349 --> 00:22:20,419

those in to initial clinical trials had

337

00:22:29,979 --> 00:22:25,359

claimed even if the clinical trials were

338

00:22:34,779 --> 00:22:29,989

valid there's always a problem because

339

00:22:38,139 --> 00:22:34,789

the clinical trials do not look at the

340

00:22:41,769 --> 00:22:38,149

people who will be treated with the drug

341

00:22:43,810 --> 00:22:41,779

after it has been approved they are part

342

00:22:46,930 --> 00:22:43,820

of that's inevitable and makes a lot of

343

00:22:49,810 --> 00:22:46,940

sense if you want to consider whether

344

00:22:52,209 --> 00:22:49,820

something lowers blood pressure you're

345

00:22:55,089 --> 00:22:52,219

going to do a clinical trial with people

346

00:22:57,219 --> 00:22:55,099

who have very high blood pressure it

347

00:23:00,070 --> 00:22:57,229

gives you the best chance of seeing

348

00:23:03,039 --> 00:23:00,080

whether the drug works so you try it out

349

00:23:05,619 --> 00:23:03,049

on people who's whose systolic is a

350

00:23:08,619 --> 00:23:05,629

hundred and eighty or 200 something like

351  
00:23:12,119 --> 00:23:08,629  
that you find it works the drug is

352  
00:23:16,060 --> 00:23:12,129  
approved and then doctors prescribe it

353  
00:23:18,909 --> 00:23:16,070  
to people whose blood pressure may be a

354  
00:23:22,299 --> 00:23:18,919  
hundred and forty and not a hundred and

355  
00:23:26,320 --> 00:23:22,309  
eighty or 200 so there's no guarantee

356  
00:23:29,639 --> 00:23:26,330  
from the clinical trial that those

357  
00:23:33,269 --> 00:23:29,649  
results can be transferred to the

358  
00:23:37,029 --> 00:23:33,279  
population that will actually be treated

359  
00:23:42,039 --> 00:23:37,039  
it's also the case that individual

360  
00:23:46,209 --> 00:23:42,049  
doctors can prescribe any approved drug

361  
00:23:50,820 --> 00:23:46,219  
for any condition not necessarily those

362  
00:23:57,629 --> 00:23:50,830  
that it's been approved for and a recent

363  
00:24:01,989 --> 00:23:57,639

survey indicated that three-quarters of

364

00:24:06,159 --> 00:24:01,999

the off lay these off-label uses of

365

00:24:10,709 --> 00:24:06,169

drugs have no scientific evidence to

366

00:24:15,249 --> 00:24:10,719

back them up 20% of all prescriptions

367

00:24:18,729 --> 00:24:15,259

are written for conditions for which the

368

00:24:19,720 --> 00:24:18,739

drug was not actually approved in the

369

00:24:22,490 --> 00:24:19,730

case of the

370

00:24:27,100 --> 00:24:22,500

psychotropic drugs for mental illnesses

371

00:24:31,120 --> 00:24:27,110

it's actually 30% one-third of the drugs

372

00:24:33,620 --> 00:24:31,130

antidepressants antipsychotics and so on

373

00:24:37,880 --> 00:24:33,630

prescriptions are written by doctors

374

00:24:41,000 --> 00:24:37,890

presumably up usually psychiatrists when

375

00:24:44,900 --> 00:24:41,010

that particular application of that drug

376

00:24:48,410 --> 00:24:44,910

was never approved and I've already

377

00:24:51,020 --> 00:24:48,420

mentioned that correlations a mistake

378

00:24:56,650 --> 00:24:51,030

and should not be mistaken for causes

379

00:25:02,180 --> 00:24:56,660

but the the terminology risk factor is

380

00:25:05,930 --> 00:25:02,190

very sneaky it makes you think that a

381

00:25:08,410 --> 00:25:05,940

risk factor actually is a risk but it

382

00:25:14,060 --> 00:25:08,420

isn't the risk factor is purely a

383

00:25:16,850 --> 00:25:14,070

statistical Association another sin of

384

00:25:20,720 --> 00:25:16,860

common sin of comission is that when the

385

00:25:23,300 --> 00:25:20,730

results of clinical trials are reported

386

00:25:26,720 --> 00:25:23,310

and remember that the people who do the

387

00:25:30,520 --> 00:25:26,730

clinical trials are the drug companies

388

00:25:33,080 --> 00:25:30,530

or organizations contract research

389

00:25:36,110 --> 00:25:33,090

organizations hired by the drug

390

00:25:38,810 --> 00:25:36,120

companies to do the trials so they'll

391

00:25:42,410 --> 00:25:38,820

present the data in in what looks like

392

00:25:45,320 --> 00:25:42,420

the most impressive way so you found

393

00:25:47,870 --> 00:25:45,330

something that lowers the mortality from

394

00:25:50,690 --> 00:25:47,880

a particular condition from four per

395

00:25:54,200 --> 00:25:50,700

hundred to two per hundred and you

396

00:25:57,560 --> 00:25:54,210

report this as a 50% reduction in

397

00:26:01,190 --> 00:25:57,570

mortality well I mean who is not going

398

00:26:06,770 --> 00:26:01,200

to buy a drug that reduces your risk of

399

00:26:10,100 --> 00:26:06,780

dying by 50% but it doesn't it reduces

400

00:26:14,570 --> 00:26:10,110

it by two percent in this case and in

401  
00:26:18,170 --> 00:26:14,580  
that case the possible side effects may

402  
00:26:21,830 --> 00:26:18,180  
be worse than the potential reduction of

403  
00:26:24,650 --> 00:26:21,840  
risk so we have sins of omission and

404  
00:26:29,810 --> 00:26:24,660  
Commission in the approval of drugs and

405  
00:26:33,080 --> 00:26:29,820  
there are wages of sin in the 1950s to

406  
00:26:36,830 --> 00:26:33,090  
nineteen sixties to prescription drug

407  
00:26:41,290 --> 00:26:36,840  
were withdrawn from use in the 1970s

408  
00:26:44,390 --> 00:26:41,300  
another - in the 1980s five after

409  
00:26:50,030 --> 00:26:44,400  
accelerated approval was introduced in

410  
00:26:53,230 --> 00:26:50,040  
the 1990s 15 drugs were were withdrawn

411  
00:26:56,900 --> 00:26:53,240  
had to be withdrawn and in the 2000s

412  
00:27:00,530 --> 00:26:56,910  
twenty six drugs had to be withdrawn and

413  
00:27:03,650 --> 00:27:00,540

what's more the time between approval

414

00:27:05,090 --> 00:27:03,660

and withdrawal has been getting shorter

415

00:27:08,540 --> 00:27:05,100

and shorter

416

00:27:11,360 --> 00:27:08,550

the anti-diabetic rezulin was on the

417

00:27:14,840 --> 00:27:11,370

market for only three years before it

418

00:27:18,650 --> 00:27:14,850

was withdrawn the antibiotic racks are

419

00:27:22,820 --> 00:27:18,660

for two years redux to suppress your

420

00:27:26,300 --> 00:27:22,830

appetite was available for only 21

421

00:27:30,670 --> 00:27:26,310

months a calcium channel blocker lasted

422

00:27:33,680 --> 00:27:30,680

a year and analgesic eleven months a

423

00:27:38,060 --> 00:27:33,690

gastrointestinal drug only ten months

424

00:27:41,990 --> 00:27:38,070

now remember there is no systematic way

425

00:27:44,510 --> 00:27:42,000

of gathering information about what a

426

00:27:48,010 --> 00:27:44,520

drug actually does after it's been

427

00:27:53,180 --> 00:27:48,020

approved for so for something to be

428

00:27:55,750 --> 00:27:53,190

withdrawn so soon after approval there

429

00:27:59,960 --> 00:27:55,760

must have been truly horrendous

430

00:28:04,760 --> 00:27:59,970

incidence of side effects and fatalities

431

00:28:08,350 --> 00:28:04,770

in order to produce the evidence for the

432

00:28:16,850 --> 00:28:13,340

one of the other things that's connected

433

00:28:21,270 --> 00:28:16,860

with drugs is the terminology of side

434

00:28:26,600 --> 00:28:23,200

[Music]

435

00:28:28,910 --> 00:28:26,610

side effect sounds as though it is

436

00:28:34,160 --> 00:28:28,920

something doesn't always occur is

437

00:28:38,870 --> 00:28:34,170

typically negligible and so on but any

438

00:28:42,470 --> 00:28:38,880

given drug has many effects and one of

439

00:28:46,100 --> 00:28:42,480

the indications of that is the penchant

440

00:28:49,870 --> 00:28:46,110

the drug companies have increasingly to

441

00:28:52,490 --> 00:28:49,880

reposition drugs what does that mean

442

00:28:57,140 --> 00:28:52,500

once the drug has been approved its

443

00:29:00,050 --> 00:28:57,150

approved for a particular condition drug

444

00:29:03,350 --> 00:29:00,060

companies are keen to get it approved to

445

00:29:05,470 --> 00:29:03,360

treat other things also because getting

446

00:29:08,420 --> 00:29:05,480

that approval is quicker and cheaper

447

00:29:13,760 --> 00:29:08,430

because after a drug has been once

448

00:29:15,800 --> 00:29:13,770

approved its regarded as safe and so you

449

00:29:18,590 --> 00:29:15,810

don't have to prove that again if it's

450

00:29:22,360 --> 00:29:18,600

going to be repositioned for something

451  
00:29:27,710 --> 00:29:22,370  
else you've probably all seen ads for

452  
00:29:31,400 --> 00:29:27,720  
cymbalta on television it was originally

453  
00:29:35,240 --> 00:29:31,410  
approved to treat anxiety and depression

454  
00:29:38,020 --> 00:29:35,250  
and peripheral neuropathy loss of

455  
00:29:42,110 --> 00:29:38,030  
feeling in the extremities and

456  
00:29:44,690 --> 00:29:42,120  
fibromyalgia peculiarly enough all at

457  
00:29:49,070 --> 00:29:44,700  
the same dosage even though those are

458  
00:29:52,220 --> 00:29:49,080  
very different conditions still the

459  
00:29:55,130 --> 00:29:52,230  
company was looking for better sales and

460  
00:29:58,940 --> 00:29:55,140  
so they successfully repositioned it

461  
00:30:03,710 --> 00:29:58,950  
under a different name to treat stress

462  
00:30:08,050 --> 00:30:03,720  
urinary incontinence now it's not only

463  
00:30:11,890 --> 00:30:08,060

the drugs have many different effects

464

00:30:15,400 --> 00:30:11,900

they can have mutually contradictory

465

00:30:20,570 --> 00:30:15,410

effects for instance for this cymbalta

466

00:30:23,890 --> 00:30:20,580

duloxetine the company lists as possible

467

00:30:28,430 --> 00:30:23,900

side effects increased urination and

468

00:30:31,370 --> 00:30:28,440

also difficulty urinating it may cause

469

00:30:34,750 --> 00:30:31,380

constipation or it may cause diarrhea

470

00:30:38,370 --> 00:30:34,760

and it may cause agitation

471

00:30:43,870 --> 00:30:38,380

or it may cause drowsiness and

472

00:30:47,549 --> 00:30:43,880

unresponsiveness so side-effects is a

473

00:30:51,070 --> 00:30:47,559

thoroughly misleading term side

474

00:30:53,409 --> 00:30:51,080

indicates implies that it's unintended

475

00:30:54,730 --> 00:30:53,419

that it's atypical that it's not

476

00:30:57,640 --> 00:30:54,740

important

477

00:31:00,960 --> 00:30:57,650

but the drug doesn't know what it's

478

00:31:05,530 --> 00:31:00,970

intended to do it just carries out its

479

00:31:09,730 --> 00:31:05,540

chemical action a side effect sounds as

480

00:31:13,210 --> 00:31:09,740

though it showed up only infrequently in

481

00:31:16,990 --> 00:31:13,220

only a few people but that's in the

482

00:31:19,780 --> 00:31:17,000

typically short clinical trials if

483

00:31:23,169 --> 00:31:19,790

something shows up as a side effect in

484

00:31:26,110 --> 00:31:23,179

six months then you may be pretty sure

485

00:31:30,130 --> 00:31:26,120

that when people start taking this for

486

00:31:35,100 --> 00:31:30,140

years that those side effects and others

487

00:31:42,659 --> 00:31:38,650

what we are doing nowadays with chronic

488

00:31:48,580 --> 00:31:42,669

diseases is we're actually treating

489

00:31:52,210 --> 00:31:48,590

symptom free illness a very informative

490

00:31:55,960 --> 00:31:52,220

book by jerry jeremy green who is an MD

491

00:32:00,490 --> 00:31:55,970

and a medical historian book is called

492

00:32:02,400 --> 00:32:00,500

prescribing by numbers relates how over

493

00:32:06,720 --> 00:32:02,410

the course of the last half century

494

00:32:12,340 --> 00:32:06,730

approximately lab tests have come to

495

00:32:15,210 --> 00:32:12,350

supersede clinical examination and I'm

496

00:32:19,030 --> 00:32:15,220

sure that you're all familiar with the

497

00:32:21,370 --> 00:32:19,040

mantra know your numbers know what your

498

00:32:26,409 --> 00:32:21,380

cholesterol level is your blood sugar

499

00:32:31,000 --> 00:32:26,419

your blood pressure and so on now it

500

00:32:34,770 --> 00:32:31,010

used to be that blood pressure that was

501  
00:32:39,270 --> 00:32:34,780  
too high hypertension would be diagnosed

502  
00:32:42,580 --> 00:32:39,280  
because people felt ill in some way

503  
00:32:46,710 --> 00:32:42,590  
severe headache dizziness blurred vision

504  
00:32:47,800 --> 00:32:46,720  
chest pain that's not the modern

505  
00:32:51,340 --> 00:32:47,810  
diagnosis

506  
00:32:54,370 --> 00:32:51,350  
of hypertension you may have none of

507  
00:32:57,460 --> 00:32:54,380  
those symptoms you can feel perfectly

508  
00:33:01,060 --> 00:32:57,470  
well you can climb stairs without

509  
00:33:04,410 --> 00:33:01,070  
getting out of breath but if your blood

510  
00:33:08,350 --> 00:33:04,420  
pressure is greater than 140 over 90

511  
00:33:15,300 --> 00:33:08,360  
you're told you have hypertension and

512  
00:33:21,730 --> 00:33:18,810  
not long after measuring blood pressure

513  
00:33:25,540 --> 00:33:21,740

became routine because the technique

514

00:33:28,690 --> 00:33:25,550

became easy there was a rule of thumb in

515

00:33:31,300 --> 00:33:28,700

the medical profession that the normal

516

00:33:37,030 --> 00:33:31,310

blood pressure is your age plus a

517

00:33:40,120 --> 00:33:37,040

hundred I looked at a bunch of datasets

518

00:33:43,320 --> 00:33:40,130

from different sources and I think that

519

00:33:46,330 --> 00:33:43,330

those actually show it's more like

520

00:33:53,800 --> 00:33:46,340

two-thirds or three-quarters of your age

521

00:33:57,570 --> 00:33:53,810

plus a hundred is normal with healthy

522

00:34:00,370 --> 00:33:57,580

individuals who don't feel any illness

523

00:34:04,180 --> 00:34:00,380

but here's what the National Institutes

524

00:34:06,190 --> 00:34:04,190

of Health says normal blood pressure is

525

00:34:11,100 --> 00:34:06,200

lower than a hundred and twenty over

526

00:34:14,260 --> 00:34:11,110

eighty most of the time in other words

527

00:34:17,500 --> 00:34:14,270

approximately twenty to thirty year old

528

00:34:21,580 --> 00:34:17,510

a person normally has in blood pressure

529

00:34:24,400 --> 00:34:21,590

high blood pressure hypertension is a

530

00:34:27,070 --> 00:34:24,410

hundred and forty over ninety most or

531

00:34:30,160 --> 00:34:27,080

above most of the time and if you're

532

00:34:36,400 --> 00:34:30,170

between those two you have pre

533

00:34:39,000 --> 00:34:36,410

hypertension and very helpfully the NIH

534

00:34:43,120 --> 00:34:39,010

tells you if you have pre hypertension

535

00:34:44,490 --> 00:34:43,130

you are more likely to develop high

536

00:34:51,460 --> 00:34:44,500

blood pressure

537

00:34:55,060 --> 00:34:51,470

normally with age that's absolutely true

538

00:34:58,090 --> 00:34:55,070

if you have pre hypertension all you've

539

00:35:00,070 --> 00:34:58,100

got to do is live a bit longer and

540

00:35:03,340 --> 00:35:00,080

you'll have

541

00:35:06,370 --> 00:35:03,350

full-blown hypertension the result of

542

00:35:09,910 --> 00:35:06,380

this definition is that about one in

543

00:35:14,620 --> 00:35:09,920

three adults in the United States is

544

00:35:18,670 --> 00:35:14,630

said to have hypertension here's a graph

545

00:35:23,670 --> 00:35:18,680

that that shows that situation blood

546

00:35:30,040 --> 00:35:26,950

120 or below is said to be normal and

547

00:35:34,930 --> 00:35:30,050

that is the blood pressure that on

548

00:35:38,590 --> 00:35:34,940

average 20 to 30 year olds have by the

549

00:35:42,220 --> 00:35:38,600

time most people are around 60 years of

550

00:35:47,820 --> 00:35:42,230

age they're at a hundred and forty and

551  
00:35:51,040 --> 00:35:47,830  
they're about to get hypertension

552  
00:35:53,970 --> 00:35:51,050  
seventy five to eighty percent of

553  
00:35:58,780 --> 00:35:53,980  
American seniors under this definition

554  
00:36:02,910 --> 00:35:58,790  
have hypertension they are sick in the

555  
00:36:06,550 --> 00:36:02,920  
absence of any symptoms at all and

556  
00:36:15,400 --> 00:36:06,560  
present practice is to prescribe drugs

557  
00:36:20,080 --> 00:36:15,410  
for them for lifelong use half a century

558  
00:36:23,230 --> 00:36:20,090  
ago diuretics were first introduced to

559  
00:36:26,650 --> 00:36:23,240  
treat high blood pressure which at that

560  
00:36:30,130 --> 00:36:26,660  
time was if people had severe headaches

561  
00:36:36,160 --> 00:36:30,140  
dizziness that sort of thing at that

562  
00:36:39,760 --> 00:36:36,170  
time cardiologists wondered whether that

563  
00:36:42,330 --> 00:36:39,770

was a good idea pointing out that the

564

00:36:46,810 --> 00:36:42,340

increase of blood pressure with age

565

00:36:50,110 --> 00:36:46,820

could be an attempt to compensate for

566

00:36:54,190 --> 00:36:50,120

other effects of aging arteries and

567

00:36:57,910 --> 00:36:54,200

veins become less flexible arteries tend

568

00:37:01,990 --> 00:36:57,920

to narrow a little bit but we want blood

569

00:37:06,190 --> 00:37:02,000

to get to the extremities so it may take

570

00:37:08,710 --> 00:37:06,200

more pressure to send it there and the

571

00:37:12,510 --> 00:37:08,720

some of the cardiologists at that time

572

00:37:16,920 --> 00:37:12,520

suggested that the general administer

573

00:37:19,980 --> 00:37:16,930

of drugs to reduce blood pressure was a

574

00:37:28,500 --> 00:37:19,990

very dangerous experiment being carried

575

00:37:32,190 --> 00:37:28,510

out on the population so I'm suggesting

576

00:37:36,900 --> 00:37:32,200

that the drug center treatment of

577

00:37:43,890 --> 00:37:36,910

chronic ailments treats normal aging as

578

00:37:46,980 --> 00:37:43,900

a disease and it prescribes lifelong

579

00:37:51,780 --> 00:37:46,990

drug use irrespective of what the side

580

00:37:55,920 --> 00:37:51,790

effects are and in absence of any valid

581

00:38:01,200 --> 00:37:55,930

evidence of benefit in terms of quality

582

00:38:05,370 --> 00:38:01,210

of life or extension of lifespan which

583

00:38:08,820 --> 00:38:05,380

reminds you of the statement the

584

00:38:14,099 --> 00:38:08,830

operation was successful but patients

585

00:38:16,680 --> 00:38:14,109

died now about a hundred years ago more

586

00:38:22,609 --> 00:38:16,690

than a hundred years ago the Food and

587

00:38:26,070 --> 00:38:22,619

Drug Administration was founded because

588

00:38:29,880 --> 00:38:26,080

in the nineteenth century and by the end

589

00:38:35,780 --> 00:38:29,890

of the 19th century there were quite a

590

00:38:39,450 --> 00:38:35,790

lot of people selling quack remedies and

591

00:38:43,560 --> 00:38:39,460

at that time people talked about the

592

00:38:48,270 --> 00:38:43,570

snake oil salesman peddling panaceas and

593

00:38:50,660 --> 00:38:48,280

Alex's of life I'm suggesting that in

594

00:38:54,530 --> 00:38:50,670

terms of the treatment of chronic

595

00:38:58,560 --> 00:38:54,540

ailments medicine has regressed a

596

00:39:02,510 --> 00:38:58,570

century or more and we now again have

597

00:39:07,050 --> 00:39:02,520

snake oil salesman peddling panaceas and

598

00:39:09,660 --> 00:39:07,060

Alexia's of life except in those days it

599

00:39:13,710 --> 00:39:09,670

was individuals doing the peddling and

600

00:39:18,120 --> 00:39:13,720

now it's corporations pharmaceutical

601  
00:39:21,150 --> 00:39:18,130  
companies but then again that may not be

602  
00:39:23,579 --> 00:39:21,160  
so different because nowadays we've

603  
00:39:26,280 --> 00:39:23,589  
learned also that corporations are

604  
00:39:39,790 --> 00:39:38,170  
thank you for listening so politely we

605  
00:39:42,190 --> 00:39:39,800  
do have time for questions are there any

606  
00:39:43,359 --> 00:39:42,200  
questions for Henry if you if there are

607  
00:39:45,339 --> 00:39:43,369  
a number of questions could you please

608  
00:39:46,300 --> 00:39:45,349  
come up if not I'll do my best to kind

609  
00:39:48,990 --> 00:39:46,310  
of run around and give you the

610  
00:39:56,650 --> 00:39:49,000  
microphone that I'm holding in my hand

611  
00:39:58,180 --> 00:39:56,660  
whoops thank you good morning Henry do

612  
00:40:02,319 --> 00:39:58,190  
you know anything about the difference

613  
00:40:03,760 --> 00:40:02,329

between drugs that are what do they call

614

00:40:05,740 --> 00:40:03,770

them you know there's the regular drug

615

00:40:08,650 --> 00:40:05,750

and then there's the prescription

616

00:40:10,089 --> 00:40:08,660

they're generic because some of them I

617

00:40:13,390 --> 00:40:10,099

understand I don't know if that's true

618

00:40:19,750 --> 00:40:13,400

are made in China and do we know what's

619

00:40:22,690 --> 00:40:19,760

even in them if it is only the active

620

00:40:25,690 --> 00:40:22,700

ingredient then there's absolutely no

621

00:40:28,059 --> 00:40:25,700

difference but the thing that people

622

00:40:31,329 --> 00:40:28,069

worry about is that with drugs

623

00:40:35,290 --> 00:40:31,339

manufactured overseas there isn't the

624

00:40:38,920 --> 00:40:35,300

same sort of care taken about what goes

625

00:40:45,260 --> 00:40:38,930

in there in the same way of monitoring

626  
00:40:52,550 --> 00:40:49,310  
there shouldn't be any difference and in

627  
00:40:55,040 --> 00:40:52,560  
many cases now generics are actually

628  
00:41:01,700 --> 00:40:55,050  
made by the same people who made the

629  
00:41:05,810 --> 00:41:01,710  
prescription drug thank you for a very

630  
00:41:09,380 --> 00:41:05,820  
exciting talk I want to know the issue

631  
00:41:12,200 --> 00:41:09,390  
of corporations peddling snake oil in

632  
00:41:15,050 --> 00:41:12,210  
the name of drugs how do we say

633  
00:41:18,020 --> 00:41:15,060  
political issue and a social issue of

634  
00:41:22,280 --> 00:41:18,030  
people are suffering what can an

635  
00:41:25,310 --> 00:41:22,290  
organization like sse do in terms of

636  
00:41:27,320 --> 00:41:25,320  
public education to deal with this kind

637  
00:41:30,350 --> 00:41:27,330  
of a problem it's a worldwide problem

638  
00:41:34,160 --> 00:41:30,360

not just in the US your thoughts will be

639

00:41:37,640 --> 00:41:34,170

appreciated thank you very much I mean

640

00:41:40,670 --> 00:41:37,650

this is a problem that is general for

641

00:41:44,030 --> 00:41:40,680

people in academia as well as in in this

642

00:41:51,140 --> 00:41:44,040

society how do you get people to notice

643

00:41:53,630 --> 00:41:51,150

what the evidence is and you know these

644

00:41:56,210 --> 00:41:53,640

things have developed very slowly one of

645

00:42:02,590 --> 00:41:56,220

the things that I found very interesting

646

00:42:05,360 --> 00:42:02,600

was that some decades ago the CEOs of

647

00:42:09,310 --> 00:42:05,370

pharmaceutical companies were people who

648

00:42:15,740 --> 00:42:09,320

had come up through the technical side

649

00:42:18,040 --> 00:42:15,750

when it was first suggested that drug

650

00:42:21,850 --> 00:42:18,050

companies should be allowed to advertise

651  
00:42:27,140 --> 00:42:21,860  
direct to consumers as we see nowadays

652  
00:42:30,700 --> 00:42:27,150  
the CEOs of the drug companies said that

653  
00:42:36,410 --> 00:42:34,400  
nowadays the CEOs of drug companies are

654  
00:42:40,250 --> 00:42:36,420  
typically people who have come up

655  
00:42:43,430 --> 00:42:40,260  
through the marketing and sales side so

656  
00:42:47,930 --> 00:42:43,440  
the whole culture of drug companies has

657  
00:42:54,410 --> 00:42:47,940  
changed and again this is something that

658  
00:42:57,410 --> 00:42:54,420  
has been documented but ignored Marcia

659  
00:42:58,340 --> 00:42:57,420  
Angell who was an editor of the New

660  
00:43:02,930 --> 00:42:58,350  
England Journal

661  
00:43:06,500 --> 00:43:02,940  
of Medicine about eight or ten years ago

662  
00:43:10,280 --> 00:43:06,510  
published a book called how the drug

663  
00:43:13,660 --> 00:43:10,290

companies deceive us and what to do

664

00:43:17,270 --> 00:43:13,670

about it now there was a you know a

665

00:43:20,900 --> 00:43:17,280

knowledgeable prominent voice that has

666

00:43:24,590 --> 00:43:20,910

had no effect and part of the reason of

667

00:43:27,680 --> 00:43:24,600

course is that the drug companies make

668

00:43:33,170 --> 00:43:27,690

such big profits that they can support

669

00:43:37,330 --> 00:43:33,180

many congressional campaigns I wish I

670

00:43:42,680 --> 00:43:39,680

well thank you very much for a very

671

00:43:45,200 --> 00:43:42,690

interesting talk you carefully steered

672

00:43:47,780 --> 00:43:45,210

clear of the whole system-wide health

673

00:43:50,290 --> 00:43:47,790

care debate which is going on right now

674

00:43:54,200 --> 00:43:50,300

costing us a bloody fortune but

675

00:43:57,050 --> 00:43:54,210

lifestyle issues seem to be something

676

00:43:58,730 --> 00:43:57,060

that doctors are either ignorant of or

677

00:44:01,460 --> 00:43:58,740

they don't get any kickbacks from that

678

00:44:03,560 --> 00:44:01,470

so they simply don't often suggest them

679

00:44:05,330 --> 00:44:03,570

and they seem to be probably the most

680

00:44:08,350 --> 00:44:05,340

beneficial when it when it come you know

681

00:44:11,690 --> 00:44:08,360

diet and exercise fresh air and so on

682

00:44:13,820 --> 00:44:11,700

but there also are some legitimate basic

683

00:44:16,370 --> 00:44:13,830

research being done like genetic

684

00:44:17,210 --> 00:44:16,380

engineering Cindy Kenyon at University

685

00:44:20,270 --> 00:44:17,220

of California

686

00:44:22,940 --> 00:44:20,280

Aubrey gray speaking of immortality that

687

00:44:28,220 --> 00:44:22,950

type of thing any comments about about

688

00:44:30,920 --> 00:44:28,230

those well it's true that research money

689

00:44:33,650 --> 00:44:30,930

is not available for those things

690

00:44:37,580 --> 00:44:33,660

because other things are more flashy and

691

00:44:42,140 --> 00:44:37,590

and attracted Colin Campbell wrote a

692

00:44:45,620 --> 00:44:42,150

book the China Study in which he talked

693

00:44:48,710 --> 00:44:45,630

about the relationship of diet to cancer

694

00:44:52,850 --> 00:44:48,720

on the basis of work that he himself had

695

00:44:56,090 --> 00:44:52,860

done and he mentions that the only way

696

00:45:00,410 --> 00:44:56,100

he was able to get this work funded was

697

00:45:05,990 --> 00:45:00,420

by calling it studies of cancer and not

698

00:45:09,170 --> 00:45:06,000

studies of nutrition or diet so it's

699

00:45:12,110 --> 00:45:09,180

also the case I think that it's very

700

00:45:17,090 --> 00:45:12,120

difficult to get good data

701  
00:45:20,030 --> 00:45:17,100  
about lifestyle issues because you have

702  
00:45:23,180 --> 00:45:20,040  
to depend very much on self-reporting by

703  
00:45:24,950 --> 00:45:23,190  
people of how they feel and even if

704  
00:45:31,850 --> 00:45:24,960  
you're honest about it you're not always

705  
00:45:33,770 --> 00:45:31,860  
right about about what's going on well

706  
00:45:36,260 --> 00:45:33,780  
as a physician who worked at a heart

707  
00:45:39,020 --> 00:45:36,270  
hospital with nutrition exercise and

708  
00:45:41,770 --> 00:45:39,030  
stress reduction and did not believe

709  
00:45:46,430 --> 00:45:41,780  
that adult onset diabetes is a disease

710  
00:45:48,890 --> 00:45:46,440  
but rather is a symptom of our society I

711  
00:45:51,970 --> 00:45:48,900  
found that the medical my medical peers

712  
00:45:54,740 --> 00:45:51,980  
did not believe what was happening that

713  
00:45:58,370 --> 00:45:54,750

that non drug treatment would be so

714

00:46:01,400 --> 00:45:58,380

effective and it actually is a solution

715

00:46:05,390 --> 00:46:01,410

to the multibillion-dollar healthcare

716

00:46:07,280 --> 00:46:05,400

crisis ran in that mid-90s the only

717

00:46:09,260 --> 00:46:07,290

education I could receive was through

718

00:46:11,180 --> 00:46:09,270

pharmaceutical companies so I dropped

719

00:46:16,900 --> 00:46:11,190

out of CME or continuing medical

720

00:46:20,000 --> 00:46:16,910

education the pharmaceutical companies

721

00:46:21,800 --> 00:46:20,010

brainwash physicians and most of them

722

00:46:23,960 --> 00:46:21,810

really just don't believe it or don't

723

00:46:28,790 --> 00:46:23,970

know what's going on so it is a

724

00:46:32,450 --> 00:46:28,800

grassroots issue yeah and you know we

725

00:46:35,300 --> 00:46:32,460

hear the statistics that so much of

726  
00:46:38,300 --> 00:46:35,310  
health care costs are spent in the last

727  
00:46:40,160 --> 00:46:38,310  
year or two of life and that older

728  
00:46:43,940 --> 00:46:40,170  
people are being given so many

729  
00:46:47,750 --> 00:46:43,950  
medications we could cut the overall

730  
00:46:50,660 --> 00:46:47,760  
cost of health care dramatically by

731  
00:46:56,810 --> 00:46:50,670  
stopping doing things that don't do us

732  
00:46:59,750 --> 00:46:56,820  
any good Henry that was a splendid talk

733  
00:47:03,940 --> 00:46:59,760  
thank you very much I just want to say

734  
00:47:07,370 --> 00:47:03,950  
that we are not helpless in the face of

735  
00:47:10,580 --> 00:47:07,380  
the corporation's the pharmaceutical

736  
00:47:13,400 --> 00:47:10,590  
companies a couple of years ago there

737  
00:47:15,770 --> 00:47:13,410  
were two international studies which

738  
00:47:19,070 --> 00:47:15,780

really flew under the radar screen

739

00:47:23,180 --> 00:47:19,080

pretty much of the profession showing

740

00:47:23,750 --> 00:47:23,190

that with attention to diet exercise and

741

00:47:28,340 --> 00:47:23,760

stress man

742

00:47:30,830 --> 00:47:28,350

and stopping smoking three force all

743

00:47:34,400 --> 00:47:30,840

heart disease could be eliminated from

744

00:47:38,210 --> 00:47:34,410

this culture and also two-thirds of all

745

00:47:43,010 --> 00:47:38,220

cancers eliminated prevented this is

746

00:47:46,730 --> 00:47:43,020

astonishing stop and when we grope for

747

00:47:49,640 --> 00:47:46,740

what we can do it's already clear you

748

00:47:51,110 --> 00:47:49,650

know that we have potent options and

749

00:47:55,460 --> 00:47:51,120

they're so potent as a matter of fact

750

00:47:57,710 --> 00:47:55,470

that they simply aren't noticed and but

751  
00:47:59,990 --> 00:47:57,720  
my point is that you know we we are not

752  
00:48:04,790 --> 00:48:00,000  
helpless I mean we really do have some

753  
00:48:08,810 --> 00:48:04,800  
big guns to play and the the problem is

754  
00:48:11,240 --> 00:48:08,820  
to spread that message to everyone who

755  
00:48:15,410 --> 00:48:11,250  
can benefit from it and there are

756  
00:48:20,570 --> 00:48:15,420  
powerful forces that oppose it you know

757  
00:48:24,130 --> 00:48:20,580  
a known side effect of statins is muscle

758  
00:48:28,550 --> 00:48:24,140  
weakness and it's known also that

759  
00:48:32,000 --> 00:48:28,560  
statins not only affect the making of

760  
00:48:35,540 --> 00:48:32,010  
cholesterol but they also affect the

761  
00:48:40,820 --> 00:48:35,550  
generation of Rubik we known known also

762  
00:48:44,920 --> 00:48:40,830  
as coenzyme q10 and coenzyme q10 is an

763  
00:48:47,900 --> 00:48:44,930

essential ingredient in every energy

764

00:48:53,170 --> 00:48:47,910

producing reaction in every cell in our

765

00:48:57,190 --> 00:48:53,180

bodies a friend of mine who is a

766

00:48:59,570 --> 00:48:57,200

biochemist approached one of the large

767

00:49:02,870 --> 00:48:59,580

pharmaceutical companies and said look

768

00:49:05,930 --> 00:49:02,880

you should market something you can call

769

00:49:08,390 --> 00:49:05,940

a super statin you add calculon's I'm

770

00:49:10,970 --> 00:49:08,400

cute into it and you reduce the side

771

00:49:14,180 --> 00:49:10,980

effects and the technical people in the

772

00:49:17,720 --> 00:49:14,190

company were very enthusiastic but it

773

00:49:20,300 --> 00:49:17,730

was vetoed by the legal department who

774

00:49:24,080 --> 00:49:20,310

said that if we start doing this we will

775

00:49:30,420 --> 00:49:24,090

be admitting that we knew that it has

776

00:49:35,200 --> 00:49:33,400

hi Henry my name is Eric shultiess and

777

00:49:39,010 --> 00:49:35,210

I'm from Leiden University Medical

778

00:49:40,570 --> 00:49:39,020

Center there's something going on in the

779

00:49:42,370 --> 00:49:40,580

pharmaceutical industry now there's kind

780

00:49:45,160 --> 00:49:42,380

of a crisis that a lot of the

781

00:49:47,970 --> 00:49:45,170

blockbuster patents are coming to an end

782

00:49:50,380 --> 00:49:47,980

and in the last 20 or 30 years it's been

783

00:49:52,390 --> 00:49:50,390

impossible for the pharmaceutical

784

00:49:54,970 --> 00:49:52,400

industry to replicate the kind of

785

00:49:58,330 --> 00:49:54,980

research that translates into

786

00:50:00,460 --> 00:49:58,340

IP and so I think even within five or

787

00:50:03,280 --> 00:50:00,470

ten years their pharmaceutical industry

788

00:50:04,599 --> 00:50:03,290

is looking at a major downsizing and

789

00:50:07,750 --> 00:50:04,609

it's already beginning to happen I know

790

00:50:08,680 --> 00:50:07,760

with the people that I work with so I'm

791

00:50:10,690 --> 00:50:08,690

just wondering if you could comment

792

00:50:13,240 --> 00:50:10,700

maybe on what's going on in the last 20

793

00:50:17,230 --> 00:50:13,250

years well I think that the drive to

794

00:50:20,190 --> 00:50:17,240

reposition drugs is one indication that

795

00:50:26,250 --> 00:50:20,200

the companies are looking for ways to

796

00:50:29,380 --> 00:50:26,260

keep their their business going I was

797

00:50:34,859 --> 00:50:29,390

interested quite recently to see that

798

00:50:39,430 --> 00:50:34,869

cialis has been repositioned to treat

799

00:50:42,250 --> 00:50:39,440

enlarged prostate for example I think

800

00:50:47,800 --> 00:50:42,260

one of the growth areas that they're

801  
00:50:52,140 --> 00:50:47,810  
going into is vaccines and one of the

802  
00:50:56,800 --> 00:50:52,150  
disasters of that already is Gardasil

803  
00:51:02,470 --> 00:50:56,810  
Gardasil is a vaccine against a few

804  
00:51:05,050 --> 00:51:02,480  
strains of human papilloma virus which

805  
00:51:12,160 --> 00:51:05,060  
was found which were found to be

806  
00:51:16,380 --> 00:51:12,170  
correlated with cervical cancer and the

807  
00:51:19,240 --> 00:51:16,390  
FDA approved this vaccine which is very

808  
00:51:23,589 --> 00:51:19,250  
expensive and there have already been

809  
00:51:27,870 --> 00:51:23,599  
something like 30,000 negative effects

810  
00:51:31,359 --> 00:51:27,880  
of of Gardasil and you may recall that

811  
00:51:34,420 --> 00:51:31,369  
people have been enthusiastically

812  
00:51:38,440 --> 00:51:34,430  
suggesting that every girl be vaccinated

813  
00:51:42,650 --> 00:51:38,450

by that Governor Perry did that in in

814

00:51:45,170 --> 00:51:42,660

Texas for a while so I'm afraid the

815

00:51:47,930 --> 00:51:45,180

one of the things that's happening is

816

00:51:52,340 --> 00:51:47,940

that the drug companies are looking to

817

00:51:55,070 --> 00:51:52,350

more and more unwarranted ways of

818

00:51:58,400 --> 00:51:55,080

selling things and they do it because

819

00:52:01,250 --> 00:51:58,410

they're able to advertise to the general

820

00:52:03,080 --> 00:52:01,260

public and what parent of course

821

00:52:06,680 --> 00:52:03,090

wouldn't want to guard their daughter

822

00:52:09,620 --> 00:52:06,690

against cervical cancer this happened by

823

00:52:12,080 --> 00:52:09,630

the way at the same time as for about 20

824

00:52:20,240 --> 00:52:12,090

years the incidence of cervical cancer