

1 *Review*

2 **Addressing suicide risk according to different** 3 **healthcare professionals in Spain: a qualitative study**

4 **Juan-Luis Muñoz Sánchez^{1,*}, María Cruz Sánchez-Gómez², María Victoria Martín-Cilleros²,**
5 **Esther Parra-Vidales³, Diego de Leo⁴ and Manuel A. Franco-Martín¹**

6 ¹ Psychiatry and Mental Health Department. Hospital Universitario Río Hortega. C/ Dulzaina, 2. 47012.
7 Valladolid. Spain.; jlmusa@icloud.com; mfm@intras.es

8 ² Departamento Didáctica de investigación y Métodos de investigación. Facultad de Educación. Universidad
9 de Salamanca. Paseo de Canalejas 169. 37008. Salamanca. Spain.; mcsago@usal.es; viquimc@usal.es

10 ³ INTRAS Foundation. Ctra. de la Hiniesta 137. 49024. Zamora. Spain.; stherpv@gmail.com

11 ⁴ Australian Institute for Suicide Research and Prevention. Griffith University, Mt Gravatt Campus, 4122.
12 Australia.; e-mail: d.deleo@griffith.edu.au

13 * Correspondence: jlmusa@icloud.com; Tel.: +34 679279973

14

15 **Abstract:** **OBJETIVE:** This study analyses the views of four groups of healthcare professionals who
16 may play a role in the management of suicidal behaviour. The goal was to identify key factors for
17 suicide prevention in different areas of the healthcare system. **METHODOLOGY:** Qualitative
18 research was conducted using focus groups made up of different healthcare professionals who
19 participated in the identification, management and prevention of suicidal behaviour. Professionals
20 included were primary care physicians, psychologists, psychiatrists and emergency physicians.
21 **RESULTS:** 'Suicide' was amongst the most relevant terms that came up in discussions most of the
22 times it appeared associated with words such as 'risk', 'danger' or 'harm'. In the analysis by
23 categories, the four groups of professionals agreed that interventions in at-risk behaviours are first
24 in importance. Prevention was the second main concern with greater significance among
25 psychiatrists. **DISCUSSION:** Primary care professionals claim for more time to address patients at
26 risk for suicide and an easier access to and communication with the mental health network.
27 Emergency care professionals have a lack of awareness of their role in the detection of risk for
28 suicide in patients who seek attention at emergency care facilities for reasons of general somatic
29 issues. Mental health care professionals are in high demand in case of self-harm but they would like
30 to receive specific training in dealing with suicidal behaviour.

31 **Keywords:** Suicide; suicidal behaviour; risk of suicide; suicide prevention; health professionals.
32

33 **1. Introduction**

34 Suicide is a serious public health issue and one of the most frequent causes of unnatural death in the world,
35 with approximately 800,000 people dying by it every year in the world [1]. It is one of the leading causes of
36 death among young people, being one of the top three in the 15-44 age range and ranking second in the 15-
37 19 age group [1]. Although the global rate of suicide in Europe is high, its epidemiology differs widely across
38 the countries [2]. Hence, suicide prevention is at the core of the operational programme of the World Health
39 Organization, whose aim is to lower suicide rates by 10% by the year 2020 [1]. The first step towards such
40 goal is effective detection. There are a number of suicide risk screening and assessment strategies available
41 to healthcare professionals, researchers and educators, but no consensus has been reached on establishing a
42 gold standard to detect suicide risk and manage suicidal behaviour [3]. Nonetheless, the importance of risk
43 detection in suicide prevention is clear from the fact that 91% of those who lose their lives to suicide have

44 been in touch with healthcare professionals at some point during the year before death, and that 66% are
45 involved in some manner with the mental health network, mainly at outpatient centres [4].

46 Suicidal behaviour is usually influenced by a variety of factors whose nature can be biological, genetic,
47 psychological, social, environmental or circumstantial [5]. In this regard, suicide and suicidal behaviour are
48 closely linked to the kind of society in which the individual lives [6]. Nevertheless, it should be noted that a
49 previous history of suicidal ideation is an important risk factor, and that having attempted suicide is the most
50 relevant predictor of death by suicide [7]. In fact, approximately 60% of the transitions from suicidal ideation
51 to planned or attempted suicide take place in the first year after the onset of such ideation [8]. On the other
52 hand, the existence or history of mental illness is the main risk factor in the general population [9-11]; mood
53 disorders, poor impulse-control, alcohol and substance abuse, psychotic and personality disorders are the
54 ones that carry a higher risk of suicide and suicidal behaviour [12-14].

55 Suicidal acts are usually preceded by milder manifestations such as thoughts of death and suicidal
56 ideation [15]. The evolution from thought to act is the transition from mild to severe symptoms in the suicidal
57 process [16]. Suicidal behaviours are one of the leading causes of morbidity and mortality, and are closely
58 linked to affective disorders [17, 18]. Suicide rates are generally quite higher in people suffering from mood
59 disorders, while the frequency of attempts is lower, which might indicate a higher risk for death in individuals
60 suffering from affective disorders [19].

61 A patient's suicide always has a huge impact on healthcare professionals, especially on those working in
62 the area of mental health, affecting them both at the professional and the personal levels [20]. Indeed, it can
63 increase awareness of the factors involved in suicide risk [21], although, on the other hand, being involved in
64 the care of people at risk for suicide can also trigger rejection, fear and high levels of stress [22]. In general,
65 healthcare professionals are sufficiently educated about suicidal behaviour, but still there are certain lacks
66 and problems that hinder an effective approach to it [23]. Moreover, healthcare professionals often display
67 negative attitudes towards patients with suicidal behaviours [24]. Therefore, adequate training in the
68 detection and management of suicide risk is crucial for its prevention [25]. In this regard, there are specific
69 training programmes for healthcare professionals to acquire skills in the assessment of suicidal behaviour and
70 in crisis intervention that have proved effective, increasing the expertise and self-confidence of these
71 professionals when faced with suicide-related behaviours [26]. This is why many healthcare professionals
72 express the need for training in how to identify signs and symptoms of suicide risk [27], and over half of the
73 mentioned professionals believe that they require preparation to successfully address patients who have
74 already attempted it [28].

75 Primary care physicians and staff and emergency medicine professionals are those who are most closely
76 in contact with patients at risk or who have performed a suicidal act [29-31]. While primary care physicians
77 are front-line in suicidal risk detection [32], they frequently find it hard to identify and assess, which renders
78 the implementation of suicide prevention programmes in the area of primary care necessary [33]. On the
79 other hand, emergency physicians usually have problems when it comes to addressing suicidal behaviour,
80 reporting time constraints, lack of privacy, difficulties to consult with other professionals and absence of
81 specific action protocols as the main barriers they face [34]. This is why effective training programmes devoted
82 to suicidal behaviour and its management are so necessary [35]. Finally, even though psychiatrists and
83 psychologists are in closer contact with individuals at risk for suicide and are trained to bear the weight of the
84 intervention [36], many of them lack training in current best-practice clinical guidelines for suicide risk
85 assessment and crisis management. Psychiatrists usually take greater responsibility in decision making as
86 regards intervention plans for people with suicidal behaviour [37]. Psychologists, for their part, are more

87 concerned with the identification and treatment of the earliest signs and symptoms of risk for suicide, as well
88 as with the prevention and eradication of risk behaviours in patients who have already attempted suicide [38-
89 40].

90 The purpose of this study is to analyse the views of four groups of healthcare professionals who play a
91 relevant role in the management of suicide risk and related behaviours with the goal of identifying the key
92 factors for suicide prevention in different areas of the healthcare system. The research is part of the European
93 Regions Enforcing Actions Against Suicide (EUREGENAS) European project, which brings together 11 regions
94 with different experiences with the aim to contribute to suicide prevention in Europe [41, 42].

95 **2. Materials and Methods**

96 *2.1. Design*

98 Qualitative research was conducted using focus groups made up of different healthcare professionals
99 who participated in the identification, management and prevention of suicidal behaviour. The study was
100 carried out in the context of the EUREGENAS project.

101

102 *2.2. Inclusion criteria*

103

104 A total of 56 participants were recruited based on the following inclusion criteria:

105

- 106 1. Healthcare professional belonging to one of the four groups selected for the study: psychiatrists,
107 psychologists, primary care physicians and emergency medicine physicians.
- 108 2. Professional experience in the area of suicide.
- 109 3. Age between 18 and 65 years.

110

111 *2.3. Recruitment*

112

113 Participants were recruited from different centres of the INTRAS Foundation and from different
114 healthcare units of the province of Zamora (Spain), which was where the trial was conducted. With regard to
115 sex, 70.6% of the participants were women and 29.4% were men. The average age of the participants was 41,
116 and the average number of years of professional experience was 14.

117 Recruitment was carried out through purposive sampling, thus preventing generalization in terms of
118 probability, and managing to register the variety of opinions on suicide prevention among the different health
119 professionals to create as much discursive space as possible.

120 This deliberate sampling included healthcare professionals in the areas involved in the prevention of suicidal
121 behaviour: primary care physicians (primary care network), psychologists/psychiatrists (mental health
122 network) and emergency medicine physicians (emergency care network). Broadly speaking, the primary care
123 network plays a relevant role in detecting the risk for suicide, emergency care handles suicidal behaviour,
124 which is usually an urgent matter, and, finally, mental health professionals intervene in the reduction or
125 eradication of the risk for suicide.

126

127

128 *2.4. Procedure*

129

130 The description and understanding of the experiences, perspectives, opinions and meanings expressed
131 by the health professionals that are in closest contact with suicide issues in terms of detection, management
132 and treatment of suicide-related behaviours was carried out using qualitative methods. This methodological
133 experience grants access to reality without the need for previous categorization. Participants were allowed to
134 express themselves spontaneously in natural contexts, yielding significant research results in the area of
135 psychiatry [43, 44] and, more specifically, in the matter of suicide [32, 45, 46]. Inter- and intra-subject
136 information gathering was conducted using a group interview (focus group) technique, which requires
137 participants' involvement and provides insight into their subjective scenario.

138 Participants were distributed into eight focus groups (two for each professional category), made up of
139 12 primary care physicians, 14 emergency physicians, 17 psychologists and 13 psychiatrists. The groups were
140 structured into strata and balanced according to the socio-demographic characteristics of the participants of
141 each professional specialty. Focus group sessions lasted between 1 and 1.5 hours and were audio and video
142 recorded. To ensure greater objectivity, the sessions were conducted by two expert researchers in qualitative
143 dynamics from the University of Salamanca who had no background knowledge of suicide (Sanchez-Gomez,
144 M.C.; Martin-Cilleros, M.V.). The interviews were carried out using a script of open-ended questions drawn up
145 in agreement with expert researchers in the mental health area (Munoz-Sanchez, J.L.; Parra-Vidales, E.;
146 Franco-Martin, M.A) who, acting as a panel of experts, made it possible to identify the most relevant aspects
147 in approaching, treating and preventing suicide-related behaviour (Figure 1). The goal was to avoid guided
148 interviews where questions might hint at a desired response. Before starting the interview, and with the prior
149 approval of the relevant ethics committee, participants signed the informed consent form and filled out a
150 socio-demographic questionnaire to make subsequent sample characterization possible. Meetings flowed
151 smoothly and in a very participative atmosphere, which encouraged subjects to speak freely, expressing their
152 ideas individually and interactively. The meetings were an attempt to describe and interpret the inter- and
153 intra-professional differences that make it possible to differentiate the meaning of suicidal behaviour
154 prevention for each professional group.

155

- **Clinical relevance:** What weight do you think is given to suicide attempts in clinical practice? Is it given relevance over other conditions?
- **Prevention:** What is done towards the prevention of suicidal behaviour?
- **Current resources for intervention:** What are the current resources for intervention?
- **Difficulties in identifying suicidal behaviour:** Which are the difficulties to identify suicidal behaviour or risk for suicide?
- **Requirements for identification:** What is needed to identify suicidal behaviour and risk for suicide?
- **Difficulties involved in the management of suicidal behaviour:** Which are the current difficulties faced when treating this type of behaviour?
- **Management facilitators:** What are the current means to facilitate treatment?
- **Identification of weaknesses in treatment:** What could be done that is not being done? or What should be done to improve what is being done?
- **Accessibility of resources for prevention:** How could accessibility to and availability of care resources for suicide prevention be to succeed in such goal?

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157

Figure 1. Thematic script for the healthcare professionals focus group sessions.

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159

2.5. Analysis

160

161

The material obtained from focus group recording was transcribed and the generated script was coded. All the speech produced, freely and spontaneously, was considered relevant. Classical qualitative content analysis was used for textual data processing with the support of Nvivo 10 software. The steps followed were those of a basic analytical process, used in most of the research conducted with this type of data: a) data transcription; b) data layout and processing; c) drawing of results and verification of findings. It should be noted that in qualitative research these stages may overlap, since the design of qualitative research is emergent.

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The analysis developed as follows: transcription of group interviews, categorization or transformation of text into data, and, finally, coding or allocation of a textual space to the corresponding category of the information gathered. Thus, a categories concept map was produced (Figure 2) according to the goals of the study, the protocol questions and the ideas expressed by the participants on aspects related to suicidal behaviour. The most representative dimensions or ideas were outlined and arranged hierarchically into 4 categories or main axes and 14 subcategories.

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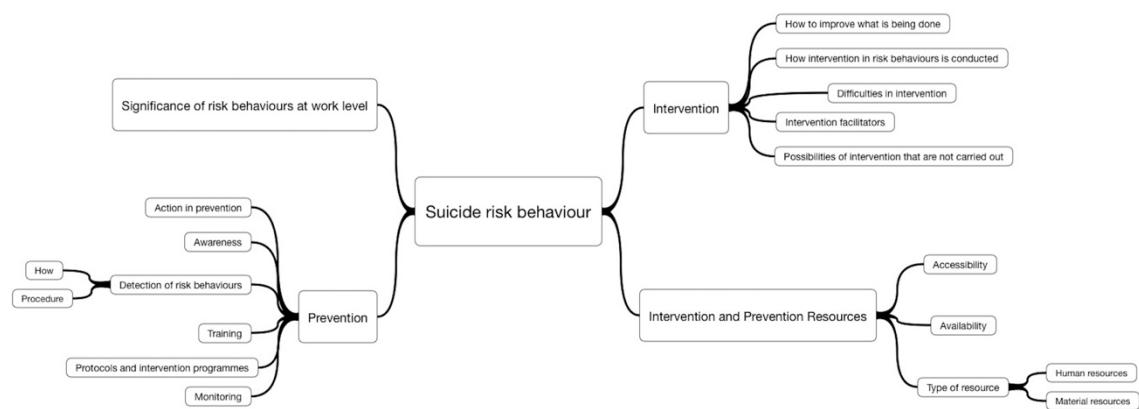
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Categorization was carried out following the criteria of quality, thoroughness, significance, accuracy, replicability and exclusivity. Coding was conducted under the supervision of several experts in qualitative research from the University of Salamanca and of a group of mental health experts, thus ensuring credibility, dependence (reliability) and confirmability (objectivity) of the analysis process.



178

179 **Figure 2.** Main categories and subcategories of suicide risk behaviour significance.

180

181 **3. Results**182 The qualitative analyses were conducted as follows: first, the most representative words and their meaning
183 in the healthcare context were described to subsequently offer a profile of the main categories (coding matrix)
184 and the relationship among them.

185

186 **3.1. Most representative words**

187

188 First of all, an analysis of word frequency in the focus groups was carried out to examine the most
189 frequently mentioned terms and identify the most relevant among them. The criteria established for
190 calculating word frequency was the selection of the 50 that appeared most often. The list was refined four
191 times, removing empty words and those with no content.

192

193 *Suicide* was amongst the most relevant terms that came up in the discourse: being the main topic
194 approached, the professionals used it repeatedly. Most of the times it appears associated with words such as
195 *risk*, which, in turn, appeared in its broadest sense with its common meaning of proximity of danger or harm.
196 The term *psychiatrist* was associated by the rest of professionals to the expert of reference when it comes to
197 the management of suicidal behaviour, placing special emphasis on the difficulties in accessing them when
198 required for this type of cases. These two, together with the term *psychologist*, are the words that were most
199 frequently mentioned by the participants in the study. *Primary* appears associated with *care*, since it is another
200 of the professional areas involved in the study, and attention is drawn to the need for communication between
201 primary care physicians, who are the first point of contact for prevention and intervention in cases of suicidal
202 behaviour, and psychiatrists. *Primary* also appears in the context of *prevention*, the latter being another of the
203 main axes to approach the issue of suicidal behaviour. Likewise, in connection with the word *programme*, they
204 refer to different levels: prevention, primary, secondary and tertiary. Because it is a clinical context, one of
205 the most frequently used words when talking about people who are at potential risk for suicidal behaviour
206 and seek consultation at health centres was *patient*. On the other hand, according to the information
207 collected, the term *emergency* appeared in two different contexts: the first was associated with the area of
208 emergency care, and the second it was used to refer to immediate and necessary emergency response actions.
209 As for the tools the different professionals rely on to work with risk behaviours, which include both human
210 and material support, the term *resource* was frequently used. Several of the questions included in the question

210 protocol drawn up for the focus groups were linked to this matter, since one of the purposes was to analyse
 211 needs and availability.

212

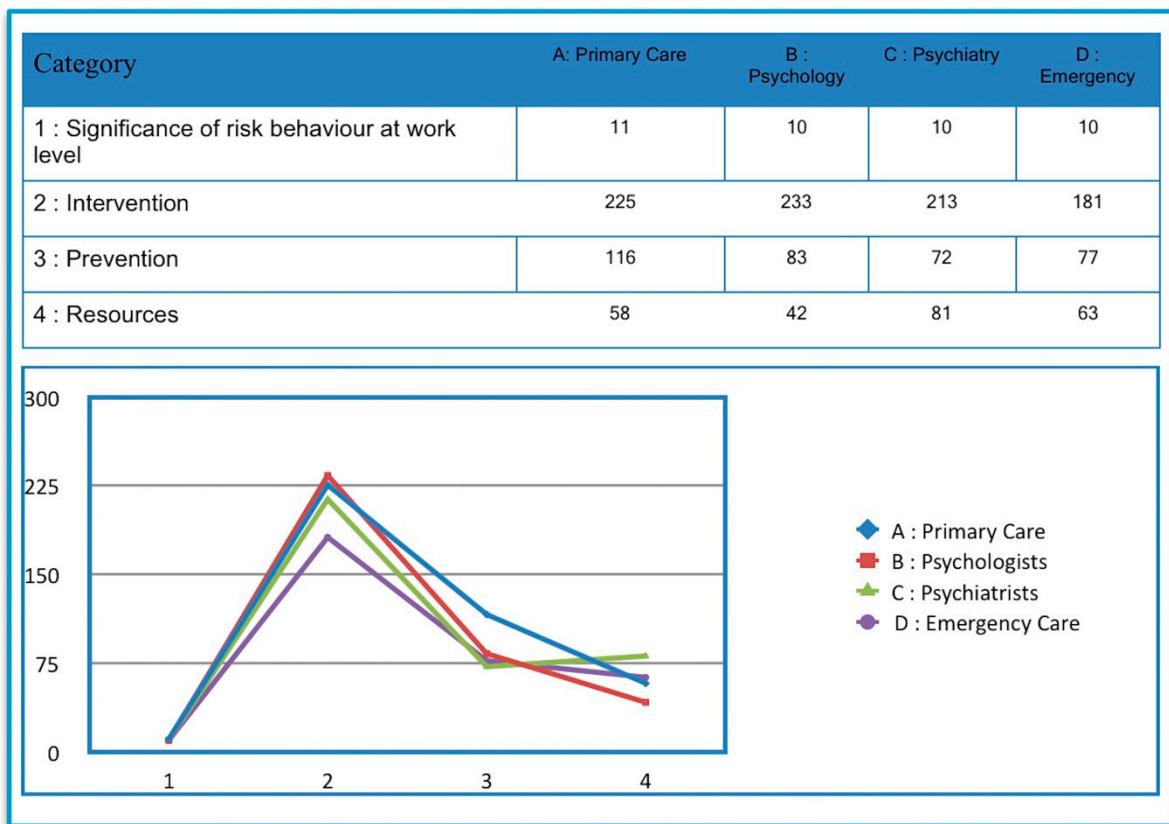
213 **3.2. Category profile**

214

215 This section describes the relevance of each of the categories that make up the concept at the overall
 216 level and for each of the interviewed healthcare groups.

217 According to the coding analysis, the four groups of professionals taking part in the study agreed that
 218 intervention in risky behaviours is first in importance (852 references). Prevention work, with 348 references,
 219 was the second main concern of these groups, although it should be noted that psychiatrists attached greater
 220 significance to resources and their availability and accessibility than to suicidal behaviour prevention, against
 221 the results expressed by the other three groups. Nevertheless, it should also be remarked that the difference
 222 in psychiatrists' opinions in terms of prevention and resources was of only 9 references. On the subject of
 223 current resources, a total of 244 references were gathered. And finally, the lowest number of references was
 224 obtained by the "significance of risk behaviour at work level" category, with a total of 41 references, although
 225 the distribution among the different professional areas is homogeneous (Figure 3).

226



227

228 **Figure 3.** Coded references.

229

230 As regards control of the discursive field during the focus group interviews conducted, commentaries
 231 were distributed as follows according to the different professional groups: in the "Intervention" category, the
 232 most eloquent professionals were emergency physicians, followed by psychiatrists and psychologists; in the
 233 "Prevention" category, emergency physicians again made the most comments, followed by psychologists and

234 psychiatrists; in “*Availability of resources*”, emergency physicians prevailed once more, closely followed by
235 psychiatrists; and finally, on the subject of “*Significance of risk behaviour*”, psychiatrists were the professionals
236 who scored the highest in level of participation, followed by emergency physicians.

237

238

239 3.2.1. Emergency physicians

240

241 For emergency physicians, intervention in suicidal behaviour bears the most weight. The
242 “*Difficulties in intervention*” node is the one with the highest number of codifications and, therefore, the most
243 important for emergency care physicians, with a total of 90 references.

244

245 “I don’t think I have the right training in psychiatry to assess many psychiatric patients.” (Reference 4
246 “*Difficulties in intervention*” - Group 1 Emergency physicians).

247

248 “... our work pace in emergency care, which involves an overwhelming demand for care services. I am
249 aware that psychiatric patients require a detailed report and that it is going to take me quite a while if I want
250 to do it properly, as I like to.” (Reference 31 “*Difficulties in intervention*” - Group 2 Emergency physicians).

251

252 The next in importance was “*How intervention in risk behaviour is conducted*”, with a total of 66
253 references.

254

255 “We are more concerned with the organic condition. If the patient eventually commits another autolytic
256 attempt, or is at risk for suicide or not, is a psychiatric aspect, we always refer them to psychiatrists.”
257 (Reference 1 “*How intervention in risk behaviours is conducted*” - Group 1 Emergency physicians).

258

259 “... that is, such case requires organic care and it is given priority more than because of the assessment
260 of risk of autolytic behaviour, because the patient’s life and safety come first, and that’s why we don’t proceed
261 otherwise.” (Reference 46 “*How intervention in risk behaviours is conducted*” - Group 2 Emergency
262 physicians).

263

264 This category includes contents related to methods of response in cases of risk behaviour. The third
265 and fourth place were taken, respectively and according to number of references found in the nodes, by
266 “*Availability of resources*” (41 references) and “*Intervention facilitators*” (38 references).

267

268 “... there is a specialist on call 24 hours that can come.” (Reference 10 “*Availability of resources*” - Group
269 1 Emergency physicians).

270

271 “Nowadays almost every patient requires a multidisciplinary approach. Any patient you might think of,
272 for example a patient with high blood pressure requires the action of several experts.” (Reference 7
273 “*Intervention facilitators*” - Group 1 Emergency physicians).

274

275 Mention should be finally made of the weight given by emergency care physicians to the need to
276 improve response actions, since the “*How to improve what is being done*” node had 31 references.

277

278 "It must be structural improvements. For example, if the problem is more personal, then a better
279 environment is needed." (Reference 13 "How to improve what is being done" - Group 2 Emergency
280 physicians).

281

282 3.2.2. Psychiatrists

283

284 Just like emergency care physicians, psychiatrists believe intervention in suicidal behaviour is of
285 utmost importance, but they also attach significant meaning to prevention of suicidal behaviour. It should be
286 noted that the "*Intervention difficulties*" category includes twice as many references as the second most
287 discussed node, "*Intervention facilitators*". In this case, as shown in the corresponding figure, 113 references
288 were coded for the first of the most discussed categories and 43 for the second.

289

290 "...90% of what we see are suicidal gestures. The trouble is that there are chances that autolytic behaviour
291 as a means to an end might be accomplished. Then, making the right decision in an emergency is very difficult."
292 (Reference 2 "Difficulties in intervention" - Group 1 Psychiatrists).

293

294 "...most suicidal people suffer from mental illness, but there is also a part that are people who kill
295 themselves and we didn't know, or have escaped our attention, or didn't have any mental illness. So I think
296 that reaching these people is also very difficult." (Reference 12 "Difficulties in intervention" - Group 2
297 Psychiatrists).

298

299 "Psychopharmacological treatment, customizing different treatment plans". (Reference 9 "Intervention
300 facilitators" - Group 1 Psychiatrists).

301

302 "Having a nursing service gives one a little reassurance. I feel reassured by knowing that if I'm not seeing
303 the patient that day, or the next, the nurse may see him, or a nurse may pay a home visit and see what has
304 happened, or how he has been feeling, or if he needs something again." (Reference 24 "Intervention
305 facilitators" - Group 1 Psychiatrists).

306

307 Other categories on which psychiatrists commented more extensively were "*Action in prevention*"
308 (38 references), in the field of prevention, and "*Possibilities in intervention that are not carried out*" (35
309 references), in the area of intervention.

310

311 "I also think that communication between primary and specialized care is fundamental because primary
312 care should act a little as the main filter for problem detection." (Reference 5 "Action in prevention" - Group
313 1 Psychiatrists).

314

315 "We are talking of psychiatrists when psychologists would be the actual point of reference in this matter.
316 Who better than them to assess potential risk for suicide outside the scope of the mentally-ill?" (Reference 1
317 "Possibilities of intervention that are not carried out" - Group 1 Psychiatrists).

318

319

320 3.2.3. Psychologists

321

322 The “*Intervention difficulties*” node yielded the highest number of codes (113), followed by
323 “*Intervention facilitators*” (79 references).

324

325 “There are really quite a lot of impulsive acts that are not based on a perfectly outlined strategy.”
326 (Reference 57 “Difficulties in intervention” - Group 1 Psychologists).

327

328 “... that scene is very difficult to manage if you don’t have trained and prepared support or reference
329 groups, where you can start working a little.” (Reference 28 “Difficulties in intervention” - Group 2
330 Psychologists).

331

332 “It is very important to rely on and be in contact with the patient’s family, and inform the family of the
333 existing risk.” (Reference 1 “Intervention facilitators” - Group 1 Psychologists).

334

335 However, there are not so many differences between those who work in the area of psychology
336 and the following categories since, although psychologists were much more concerned with prevention
337 (Action in prevention - 32 references), the number of references regarding the procedures to be followed to
338 respond to these behaviours (How to intervene in risk behaviours - 28 references) and the possibilities to
339 improve intervention (Possibilities in intervention that are not being carried out - 26 references) was not much
340 lower, as is the case with Availability of current resources (27 references).

341

342 “That the patient may come to you at any time regardless of having or not having an appointment, that
343 is, to always leave the door open for them to come, that is the first thing.” (Reference 2 “Action in prevention”
344 - Group 2 Psychologists).

345

346 “If intervening on the emotional factors involved in the matter is the way of processing feelings. In other
347 words, what we always do.” (Reference 8 “How intervention in risk behaviour is conducted” - Group 2
348 Psychologists).

349

350 “I think that each case should be looked into individually, which would help to understand and do a little
351 more research to learn some more about how to address this issue. It shouldn’t be dismissed as only attention
352 seeking.” (Reference 8 “Possibilities of intervention that are not carried out” - Group 1 Psychologists).

353

354

355 3.2.4. Primary care physicians

356

357 To complete the analysis of the category profiles, primary care physicians also reported the
358 difficulties they encounter when dealing with these cases (Difficulties in intervention in risk behaviours - 115
359 references), followed, as in most of the mentioned professional categories, by “*Intervention facilitators*” (63
360 references).

361

362 "I'm not comfortable at all with this condition, I don't think I've got the training to handle it, for many
363 reasons." (Reference 3 "Difficulties in intervention" - Group 2 Primary care physicians).

364
365 "I think time is always the main difficulty, because you can't spend five minutes on this kind of patient,
366 you start to ask and talk..." (Reference 45 "Difficulties in intervention" - Group 2 Primary care physicians).

367
368 "We already know many of our patients and they come to us frequently..." (Reference 1 "Intervention
369 facilitators" - Group 2 Primary care physicians).

370
371 "The family, when a patient is at such risk the family knows what must be prevented and watched."
372 (Reference 7 "Intervention facilitators" - Group 2 Primary care physicians).

373
374 The third and fourth places were taken by improvement in response (How to improve what is
375 currently done - 32 references) and "*Availability of resources*" (30 references).

376
377 "To me, personally, that we be more professional, with less patients. That is, longer consultation time"
378 (Reference 3 "How to improve what is being done" - Group 1 Primary care physicians).

379
380 "Just as there could be a telephone or situation to detect gender-based violence, I don't know if there is
381 something similar for this type of behaviours. I'm not aware of it." (Reference 14 "Availability of resources" -
382 Group 1 Primary care physicians).

383
384 **4. Discussion**

385 As it would be expected, the most representative word expressed by the focus groups was "suicide", mainly
386 associated with the word "risk". The next terms that the participants used the most were "psychiatrist" and
387 "psychologist", which reflects the major role played by mental health professionals in the management of
388 suicidal behaviour, as well as the frequent link between suicide and mental illness. Conversely, it is interesting
389 to observe how the term "primary" comes up quite often in the course of the discussion in association with
390 different terms such as "care" in the context of primary healthcare as a professional category that is closely
391 linked to suicide, since primary care physicians have the most direct contact with patients and their families
392 and, therefore, would be more qualified for early detection of suicide risk factors. Furthermore, primary care
393 physicians play a major role in primary prevention, "prevention" being the second most frequent term that
394 appears associated with "primary", which reflects the need for intervention in the area of suicide prevention
395 to be delivered at an early stage. Another of the most recurrent words was "resource", which would point to
396 the need for more human or material tools for suicide prevention.

397 An analysis of the findings according to each category profile shows differences among the different
398 professional groups of participants in their perception of the approach and management of suicidal behaviour.
399 In general, healthcare professionals consider that attending patients with suicide related behaviours is a huge
400 challenge [26]. The results of this study show that difficulties in intervention in suicidal behaviour are the main
401 aspect stressed by the sample of professionals that took part to this investigation. The skills of the different
402 health professionals in the area of suicidal behaviour vary widely from one group to another, and are closely
403 linked to the individual experience of each of them with this type of intervention [47]. The findings reveal
404 important differences among the groups of professionals. In fact, the main question formulated by general

405 practitioners is knowing clearly how and when to intervene. Thus, training in theoretical models for action and
406 in communication skills would be of the utmost importance [48].

407 The most remarkable difference concerns the attitude towards risk behaviours of the different
408 professional groups under analysis. This difference is most noticeable between the emergency care group and
409 the rest of professionals, in particular with mental health experts (psychiatrists and psychologists).

410 Specifically, according to professional type, one of the main issues to stress is the broad relationship
411 between primary care physicians and individuals who perform suicidal acts, since their area of expertise
412 entails direct contact with patients in the community. According to a recent study, approximately 80% of the
413 individuals who die by suicide have been in contact with their primary care team during the year before the
414 fatal act [49]. De Leo et al. [30] argue that 90% of the individuals who die by suicide seek help from the
415 healthcare system, especially in the area of primary care, during the three months before their demise.
416 Mention should be made of the fact that primary care physicians are a heterogeneous group of professionals
417 with varying degrees of affinity with mental illness within their clinical practice. This picture reveals the lacks
418 of general practitioners in the management of patients with suicidal behaviour [50]. One of the noteworthy
419 results of our qualitative study is that most physicians who work in primary care consider that the main
420 obstacles for intervention in the area of suicide are their lack of sufficient skills and knowledge to ensure a
421 successful approach to the issue, a view that is also expressed by emergency medicine physicians. The
422 perception of the existence of failures in approaching and managing patients at risk for suicide expressed
423 by primary care physicians has been previously reported [33, 46, 51-54].

424 Time constraints is another difficulty - according to general practitioners -, since it prevents from
425 adequate assessment of patients at risk of suicide. This could be explained by the tight schedule they are
426 expected to follow when seeing patients and could be considered generally inherent to primary care services.
427 Among factors that would make intervention easier for primary care physicians, the most outstanding are
428 their thorough knowledge of their patients, their closeness to them and their possibility of directly accessing
429 patients' social and family background. These facilitators play a major role in the early detection of risk for
430 suicide and draws awareness to the fact that joint intervention with mental health services should be a key
431 aspect when designing suicide prevention programmes. A recent qualitative study stressed the need for
432 primary care physicians to engage the relatives of patients at risk for suicide in the decision-making process
433 [54]. Another study by Bocquier et al. [52] analysed the abilities of a group of general practitioners in detecting
434 the risk of suicide, yielding a great deal of variation in proper identification, which reveals the need for greater
435 collaboration with mental health experts, as wells as the need for further education and training in how to
436 approach suicidal behaviour. Another important aspect in the area of primary care is the availability of and
437 accessibility to the mental health network, in order to count on consultation and referral when needed.

438 Responses to suicidal behaviour in emergency care services are expectedly immediate, paying attention
439 to managing a critical emergency rather than to the identification of the risk for suicide or its prevention. The
440 results of the emergency physicians' contributions reveal that the involvement of this group of professionals
441 in the management and prevention of suicidal behaviour is low, since their priority is to treat the physical
442 injuries resulting from self-harm, considering that the rest of the intervention required in terms of care and
443 prevention falls outside their competence. According to Suokas et al. [55], the skills of emergency care
444 physicians do not vary significantly when there is a psychiatric unit in emergency care, although they generally
445 believe in the need for such unit and are happy with it. Emergency care physicians' position of believing that
446 suicide-related behaviour is solely the competence of mental health professionals has the obvious
447 consequence of their having less knowledge and skills to manage and prevent it. As a result, the low level of

448 training in the area of suicide of emergency care physicians considerably limits detection of people at risk for
449 suicide when suicidal ideation is not stated as the main reason for seeking medical attention at the emergency
450 department. A recent qualitative research study conducted by Giacchero Vedana et al. [56] using a sample of
451 nursing professionals working in emergency services showed how these professionals express higher levels of
452 negative feelings towards the patient and a sense of lower levels of professional competence in the area of
453 suicidal behaviour management which is partly consistent with our results.

454 Experts in the area of mental health (psychiatrists and psychologists) believe that the most important
455 aspects with regard to suicide are intervention difficulties. However, against the results yielded by the
456 contributions of emergency and primary care physicians expressing a lack of training and skills in the
457 management of individuals with suicidal behaviour, mental health professionals believe that they are
458 sufficiently qualified to address this issue. This is in contrast with a recent study stating that mental health
459 professionals' main difficulties in addressing suicidal behaviours are related to decision making [57]. Although
460 not associated with training requirements, this is also indirectly revealed by our study, since psychiatrists
461 acknowledge difficulties as regards intervention in and management of suicidal behaviour. It should also be
462 emphasized that these difficulties are mostly related to distinguishing between non-suicidal self-injury, not
463 aimed at death, and suicidal behaviour, where there is intent to die. In any case, the increasing trend towards
464 the practice of defensive medicine would render decision-making based on patients' wellbeing as the main
465 target more difficult [58, 59]. On the other hand, evidence shows that one out of every three mental health
466 professionals does not regularly ask patients about ideas or thoughts related to suicide [60]. This leads to the
467 conclusion that mental health professionals are perhaps not as aware as they should be of their need for
468 further training and that it could be necessary for them to improve their detection and management skills,
469 regardless of the fact that they might not know it. Either way, we believe that this should not be the main
470 target for improvement in this field.

471 The results of this qualitative analysis also reveal the major role played by mental health professionals,
472 especially psychiatrists, in addressing suicidal behaviour. In this regard, psychiatrists attach special relevance
473 to the difficulties they have in accessing patients who are outside the mental health network and are at risk
474 for suicide. The high number of people with suicidal behaviour who have never been referred to mental health
475 services is quite striking [61, 62]. Mental health professionals claim better coordination with primary care as
476 an important factor to detect cases that are not within the mental health network. This result is consistent
477 with a qualitative research study conducted by Roelands et al. [63] involving an analysis of opinions of
478 psychiatrists and emergency physicians, both looking to a greater collaboration between these two
479 professional groups, as well as to a better integration of the mental health network in the area of primary
480 care.

481 On the other hand, psychiatrists also seem to perceive the need for greater involvement and
482 commitment of psychologists in the area of suicide, strongly believing in the positive effects of psychological
483 therapies to reduce the risk for suicide. A meta-analysis conducted by Calati and Courtet in 2016 [39]
484 confirmed the overall positive effect of psychotherapy interventions in reducing the risk for suicide.
485 Psychiatrists also stress the importance - in everyday clinical practice - of interventions such as
486 pharmacological treatments or community support networks. And in fact community-oriented mental health
487 services register lower suicide rates than traditional mental health services [64].

488 Professionals in the area of psychology agree with psychiatrists on the difficulties involved in
489 differentiating planned from impulsive acts of self-harm. Psychologists believe that, because of their
490 unpredictable nature, impulsive suicide attempts are more difficult to prevent, thus requiring a more complex

491 intervention on the personality structure of these patients. These professionals believe in the crucial
492 importance of a favourable social and family background towards psychological interventions, with whom to
493 also work independently. Lack of support or referral groups is one of the main problems in the eyes of the
494 psychologists taking part in this study. There is good evidence of the effectiveness of psychosocial
495 interventions in suicide prevention, and in recent years we have witnessed the development of new therapies
496 focused on the family and the environment of the individual at risk for suicide [65-70]. In agreement with
497 psychiatrists, psychologists believe that community support networks would facilitate suicide prevention and
498 contribute towards patient adherence to psychotherapeutic interventions, while also enhancing the chances
499 of intervening during crises and being able to identify changes in behaviour that may hint at a potential risk
500 for suicide. The results of a study by Gilat et al [71] using online support groups suggest that these groups
501 allow individuals who have engaged in suicidal behaviour to create an atmosphere where they can find
502 emotional support and alternatives to suicide to address their problems.

503

504 **5. Conclusions**

505 The conclusion that can be drawn from these findings is that there are needs to be met and policies to be
506 developed to improve the care of people at risk for suicide. The following points summarises desirable
507 improvements in each area of the healthcare network involved in the management and treatment of suicidal
508 behaviour.

509

510 *5.1. Primary Care Physicians*

511

- 512 1. Need for more time to address patients at risk for suicide.
- 513 2. Easier access to and communication with the mental health network.
- 514 3. Availability of immediate or within 24 hours referral.
- 515 4. Lack of training in the management of suicidal behaviour.

516

517 *5.2. Emergency Care Physicians*

518

- 519 • Lack of awareness of their role in the detection of risk for suicide in patients who seek
520 attention at emergency care facilities for reasons of general somatic issues.
- 521 • They focus their response on handling the risk for death to later refer the patient to
522 psychiatric services.

523

524 *5.3. Mental Health Care Physicians*

525

- 526 • High demand, especially in self-harming behaviours that require a specific approach.
- 527 • Give more priority to psychotherapeutic interventions and improve the availability and role
528 of clinical psychologists in the management of suicidal behaviour.
- 529 • Need for the implementation of specific programmes to address suicidal behaviour: group
530 therapy, etc.
- 531 • Accessibility should be an important part of intervention.
- 532 • Importance of the role of a community support network, especially involving home care by
533 nursing professionals.

534 Improvement in coordination with primary care for the detection of cases that are not within the mental
535 health network.

536

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539 Sánchez, María Cruz Sánchez-Gómez, María Victoria Martín-Cilleros and Esther Parra-Vidales; validation, Juan-
540 Luis Muñoz Sánchez, Esther Parra-Vidales and Manuel A. Franco-Martín; formal analysis, Juan-Luis Muñoz
541 Sánchez, María Cruz Sánchez-Gómez and María Victoria Martín-Cilleros; investigation, Juan-Luis Muñoz
542 Sánchez, María Cruz Sánchez-Gómez, María Victoria Martín-Cilleros, Esther Parra-Vidales, and Manuel A.
543 Franco-Martín.; resources, Juan-Luis Muñoz Sánchez, Esther Parra-Vidales and Manuel A. Franco-Martín.; data
544 curation, Juan-Luis Muñoz Sánchez, María Cruz Sánchez-Gómez, María Victoria Martín-Cilleros and Esther
545 Parra-Vidales; writing—original draft preparation Juan-Luis Muñoz Sánchez and Manuel A. Franco-Martín.;
546 writing—review and editing, Juan-Luis Muñoz Sánchez, Diego de Leo and Manuel A. Franco-Martín.;
547 visualization, Juan-Luis Muñoz Sánchez, Diego de Leo and Manuel A. Franco-Martín.; supervision, Juan-Luis
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555 **References**

- 556 1. WHO, Preventing Suicide: A Global Imperative. 2014.
- 557 2. Kovess-Masfety, V., et al., High and low suicidality in Europe: a fine-grained comparison of France and
558 Spain within the ESEMeD surveys. *J Affect Disord*, 2011. **133**(1-2): p. 247-56.
- 559 3. Silverman, M.M., et al., Rebuilding the tower of Babel: a revised nomenclature for the study of suicide and
560 suicidal behaviors. Part 1: Background, rationale, and methodology. *Suicide Life Threat Behav*, 2007. **37**(3):
561 p. 248-63.
- 562 4. Schaffer, A., et al., Population-based analysis of health care contacts among suicide decedents: identifying
563 opportunities for more targeted suicide prevention strategies. *World Psychiatry*, 2016. **15**(2): p. 135-45.
- 564 5. Steeg, S., et al., The exacerbating influence of hopelessness on other known risk factors for repeat self-harm
565 and suicide. *J Affect Disord*, 2016. **190**: p. 522-8.
- 566 6. Neeleman, J., Beyond risk theory: suicidal behavior in its social and epidemiological context. *Crisis*, 2002.
567 **23**(3): p. 114-20.
- 568 7. Ribeiro, J.D., et al., Self-injurious thoughts and behaviors as risk factors for future suicide ideation,
569 attempts, and death: a meta-analysis of longitudinal studies. *Psychol Med*, 2015: p. 1-12.
- 570 8. Borges, G., et al., Twelve-month prevalence of and risk factors for suicide attempts in the World Health
571 Organization World Mental Health Surveys. *J Clin Psychiatry*, 2010. **71**(12): p. 1617-28.
- 572 9. Foster, T., K. Gillespie, and R. McClelland, Mental disorders and suicide in Northern Ireland. *Br J
573 Psychiatry*, 1997. **170**: p. 447-52.
- 574 10. Oldham, J.M., Borderline personality disorder and suicidality. *Am J Psychiatry*, 2006. **163**(1): p. 20-6.
- 575 11. Osborn, D., et al., Suicide and severe mental illnesses. Cohort study within the UK general practice research
576 database. *Schizophr Res*, 2008. **99**(1-3): p. 134-8.

577 12. Kessler, R.C., G. Borges, and E.E. Walters, Prevalence of and risk factors for lifetime suicide attempts in the
578 National Comorbidity Survey. *Arch Gen Psychiatry*, 1999. **56**(7): p. 617-26.

579 13. Hawton, K., et al., Comorbidity of axis I and axis II disorders in patients who attempted suicide. *Am J
580 Psychiatry*, 2003. **160**(8): p. 1494-500.

581 14. Nock, M.K. and R.C. Kessler, Prevalence of and risk factors for suicide attempts versus suicide gestures:
582 analysis of the National Comorbidity Survey. *J Abnorm Psychol*, 2006. **115**(3): p. 616-23.

583 15. Neeleman, J., R. de Graaf, and W. Vollebergh, The suicidal process; prospective comparison between early
584 and later stages. *J Affect Disord*, 2004. **82**(1): p. 43-52.

585 16. Runeson, B.S., J. Beskow, and M. Waern, The suicidal process in suicides among young people. *Acta
586 Psychiatr Scand*, 1996. **93**(1): p. 35-42.

587 17. Hawton, K., et al., Risk factors for suicide in individuals with depression: a systematic review. *J Affect
588 Disord*, 2013. **147**(1-3): p. 17-28.

589 18. Coryell, W., et al., Risk factors for suicide in bipolar I disorder in two prospectively studied cohorts. *J Affect
590 Disord*, 2016. **190**: p. 1-5.

591 19. Schaffer, A., et al., A review of factors associated with greater likelihood of suicide attempts and suicide
592 deaths in bipolar disorder: Part II of a report of the International Society for Bipolar Disorders Task Force
593 on Suicide in Bipolar Disorder. *Aust N Z J Psychiatry*, 2015. **49**(11): p. 1006-20.

594 20. Dransart, D.A., et al., Patient suicide in institutions: emotional responses and traumatic impact on Swiss
595 mental health professionals. *Death Stud*, 2014. **38**(1-5): p. 315-21.

596 21. Gulfi, A., et al., The Impact of Patient Suicide on the Professional Practice of Swiss Psychiatrists and
597 Psychologists. *Acad Psychiatry*, 2016. **40**(1): p. 13-22.

598 22. Castelli Dransart, D.A., et al., Stress reactions after a patient suicide and their relations to the profile of
599 mental health professionals. *BMC Psychiatry*, 2015. **15**: p. 265.

600 23. Smith, A.R., et al., An assessment of suicide-related knowledge and skills among health professionals.
601 *Health Psychol*, 2014. **33**(2): p. 110-9.

602 24. Saunders, K.E., et al., Attitudes and knowledge of clinical staff regarding people who self-harm: a
603 systematic review. *J Affect Disord*, 2012. **139**(3): p. 205-16.

604 25. Palmieri, G., et al., Suicide intervention skills in health professionals: a multidisciplinary comparison. *Arch
605 Suicide Res*, 2008. **12**(3): p. 232-7.

606 26. Mirick, R., et al., Continuing Education on Suicide Assessment and Crisis Intervention: What Can We Learn
607 About the Needs of Mental Health Professionals in Community Practice? *Community Ment Health J*, 2016.
608 **52**(5): p. 501-10.

609 27. Gaffney, P., et al., Impact of patient suicide on front-line staff in Ireland. *Death Stud*, 2009. **33**(7): p. 639-56.

610 28. Rothes, I.A., et al., Facing a patient who seeks help after a suicide attempt: the difficulties of health
611 professionals. *Crisis*, 2014. **35**(2): p. 110-22.

612 29. Hitosugi, M., T. Nagai, and S. Tokudome, A voluntary effort to save the youth suicide via the Internet in
613 Japan. *Int J Nurs Stud*, 2007. **44**(1): p. 157.

614 30. De Leo, D., et al., Contacts with health professionals before suicide: missed opportunities for prevention?
615 Compr Psychiatry, 2013. **54**(7): p. 1117-23.

616 31. Fedyszyn, I.E., et al., Repeated suicide attempts and suicide among individuals with a first emergency
617 department contact for attempted suicide: a prospective, nationwide, Danish register-based study. J Clin
618 Psychiatry, 2016.

619 32. Fhaili, M.N., N. Flynn, and S. Dowling, Experiences of suicide bereavement: a qualitative study exploring
620 the role of the GP. Br J Gen Pract, 2016. **66**(643): p. e92-8.

621 33. Younes, N., et al., Attempted and completed suicide in primary care: not what we expected? J Affect Disord,
622 2015. **170**: p. 150-4.

623 34. Petrik, M.L., et al., Barriers and facilitators of suicide risk assessment in emergency departments: a
624 qualitative study of provider perspectives. Gen Hosp Psychiatry, 2015. **37**(6): p. 581-6.

625 35. Egan, R., K.M. Sarma, and M. O'Neill, Factors influencing perceived effectiveness in dealing with self-
626 harming patients in a sample of emergency department staff. J Emerg Med, 2012. **43**(6): p. 1084-90.

627 36. Simon, R.I., Behavioral risk assessment of the guarded suicidal patient. Suicide Life Threat Behav, 2008.
628 **38**(5): p. 517-22.

629 37. Baca-Garcia, E., et al., Variables associated with hospitalization decisions by emergency psychiatrists after
630 a patient's suicide attempt. Psychiatr Serv, 2004. **55**(7): p. 792-7.

631 38. Hepp, U., et al., Psychological and psychosocial interventions after attempted suicide: an overview of
632 treatment studies. Crisis, 2004. **25**(3): p. 108-17.

633 39. Calati, R. and P. Courte, Is psychotherapy effective for reducing suicide attempt and non-suicidal self-
634 injury rates? Meta-analysis and meta-regression of literature data. J Psychiatr Res, 2016. **79**: p. 8-20.

635 40. Forkmann, T., et al., The Effects of Mindfulness-Based Cognitive Therapy and Cognitive Behavioral
636 Analysis System of Psychotherapy added to Treatment as Usual on suicidal ideation in chronic depression:
637 Results of a randomized-clinical trial. J Affect Disord, 2016. **200**: p. 51-7.

638 41. Munoz-Sanchez, J.L., et al., Use of New Technologies in the Prevention of Suicide in Europe: An
639 Exploratory Study. JMIR Ment Health, 2017. **4**(2): p. e23.

640 42. Munoz-Sanchez, J.L., et al., Facilitating Factors and Barriers to the Use of Emerging Technologies for
641 Suicide Prevention in Europe: Multicountry Exploratory Study. JMIR Ment Health, 2018. **5**(1): p. e7.

642 43. Whitley, R. and M. Crawford, Qualitative research in psychiatry. Can J Psychiatry, 2005. **50**(2): p. 108-14.

643 44. Whitley, R., Introducing psychiatrists to qualitative research: a guide for instructors. Acad Psychiatry, 2009.
644 **33**(3): p. 252-5.

645 45. Fairman, N., et al., What did I miss? A qualitative assessment of the impact of patient suicide on hospice
646 clinical staff. J Palliat Med, 2014. **17**(7): p. 832-6.

647 46. Michail, M. and L. Tait, Exploring general practitioners' views and experiences on suicide risk assessment
648 and management of young people in primary care: a qualitative study in the UK. BMJ Open, 2016. **6**(1): p.
649 e009654.

650 47. Scheerder, G., et al., Suicide intervention skills and related factors in community and health professionals.
651 Suicide Life Threat Behav, 2010. **40**(2): p. 115-24.

652 48. Rothes, I.A. and M.R. Henriques, Health Professionals' Explanations of Suicidal Behaviour: Effects of
653 Professional Group, Theoretical Intervention Model, and Patient Suicide Experience. *Omega* (Westport),
654 2017. **76**(2): p. 141-168.

655 49. Stene-Larsen, K. and A. Reneflot, Contact with primary and mental health care prior to suicide: A
656 systematic review of the literature from 2000 to 2017. *Scand J Public Health*, 2017: p. 1403494817746274.

657 50. Sudak, D., et al., Deficiencies in suicide training in primary care specialties: a survey of training directors.
658 *Acad Psychiatry*, 2007. **31**(5): p. 345-9.

659 51. Vannoy, S.D., et al., Now what should I do? Primary care physicians' responses to older adults expressing
660 thoughts of suicide. *J Gen Intern Med*, 2011. **26**(9): p. 1005-11.

661 52. Bocquier, A., et al., Physicians' characteristics associated with exploring suicide risk among patients with
662 depression: a French panel survey of general practitioners. *PLoS One*, 2013. **8**(12): p. e80797.

663 53. Saini, P., K. Chantler, and N. Kapur, General practitioners' perspectives on primary care consultations for
664 suicidal patients. *Health Soc Care Community*, 2016. **24**(3): p. 260-9.

665 54. Leavey, G., et al., The failure of suicide prevention in primary care: family and GP perspectives - a
666 qualitative study. *BMC Psychiatry*, 2017. **17**(1): p. 369.

667 55. Suokas, J., K. Suominen, and J. Lonnqvist, The attitudes of emergency staff toward attempted suicide
668 patients: a comparative study before and after establishment of a psychiatric consultation service. *Crisis*,
669 2009. **30**(3): p. 161-5.

670 56. Giacchero Vedana, K.G., et al., Attitudes towards suicidal behaviour and associated factors among nursing
671 professionals: A quantitative study. *J Psychiatr Ment Health Nurs*, 2017. **24**(9-10): p. 651-659.

672 57. Gale, T.M., et al., Perception of Suicide Risk in Mental Health Professionals. *PLoS One*, 2016. **11**(2): p.
673 e0149791.

674 58. McCabe, R., et al., How do healthcare professionals interview patients to assess suicide risk? *BMC
675 Psychiatry*, 2017. **17**(1): p. 122.

676 59. Reuveni, I., et al., Cross-sectional survey on defensive practices and defensive behaviours among Israeli
677 psychiatrists. *BMJ Open*, 2017. **7**(3): p. e014153.

678 60. Roush, J.F., et al., Mental Health Professionals' Suicide Risk Assessment and Management Practices. *Crisis*,
679 2018. **39**(1): p. 55-64.

680 61. Jones, H. and A. Cipriani, Improving access to treatment for mental health problems as a major component
681 of suicide prevention strategy. *Aust N Z J Psychiatry*, 2016. **50**(2): p. 176-8.

682 62. Kim, H.S., M.S. Lee, and J.Y. Hong, Determinants of Mental Health Care Utilization in a Suicide High-risk
683 Group With Suicidal Ideation. *J Prev Med Public Health*, 2016. **49**(1): p. 69-78.

684 63. Roelands, M., R. Deschepper, and J. Bilsen, Psychiatric Consultation and Referral of Persons Who Have
685 Attempted Suicide. *Crisis*, 2017. **38**(4): p. 261-268.

686 64. Pirkola, S., et al., Community mental-health services and suicide rate in Finland: a nationwide small-area
687 analysis. *Lancet*, 2009. **373**(9658): p. 147-53.

688 65. Miklowitz, D.J. and D.O. Taylor, Family-focused treatment of the suicidal bipolar patient. *Bipolar Disord*,
689 2006. **8**(5 Pt 2): p. 640-51.

690 66. Joe, S. and H. Bryant, Evidence-Based Suicide Prevention Screening in Schools. *Child Sch*, 2007. **29**(4): p.
691 219-227.

692 67. Hawton, K., et al., Psychosocial interventions following self-harm in adults: a systematic review and meta-
693 analysis. *Lancet Psychiatry*, 2016. **3**(8): p. 740-750.

694 68. Meerwijk, E.L., et al., Direct versus indirect psychosocial and behavioural interventions to prevent suicide
695 and suicide attempts: a systematic review and meta-analysis. *Lancet Psychiatry*, 2016. **3**(6): p. 544-54.

696 69. Cox, G. and S. Hetrick, Psychosocial interventions for self-harm, suicidal ideation and suicide attempt in
697 children and young people: What? How? Who? and Where? *Evid Based Ment Health*, 2017. **20**(2): p. 35-40.

698 70. Weinstein, S.M., et al., Child- and Family-Focused Cognitive Behavioral Therapy for Pediatric Bipolar
699 Disorder: Applications for Suicide Prevention. *Suicide Life Threat Behav*, 2017.

700 71. Gilat, I., Y. Tobin, and G. Shahar, Offering support to suicidal individuals in an online support group. *Arch*
701 *Suicide Res*, 2011. **15**(3): p. 195-206.