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1 **Abstract**

2 ***Objectives***

3 This study aims to explore the incidence of moral distress experienced by UK
4 community pharmacists through the deployment of a previously developed and
5 validated survey instrument to a national sample.

6 ***Methods***

7 An e-mail inviting pharmacists to complete an on-line questionnaire developed to
8 measure moral distress was successfully delivered via the mailing list of a
9 nationwide support organisation for the pharmacy profession. Completed
10 questionnaires were subjected to statistical analysis to determine to what extent
11 common practice scenarios generated moral distress in community pharmacists.

12 ***Key findings***

13 Time constraints represent the greatest source of moral distress for United Kingdom
14 (UK) community pharmacists, scoring highest for both frequency and intensity of
15 distress. The supply of emergency hormonal contraception (EHC) in opposition to
16 religious beliefs scored lowest. Possible underlying causes of moral distress are
17 discussed in the light of our results, and potential mechanisms for reducing the
18 incidence of moral distress for this professional group are considered.

19 The reduction in the frequency and occurrence of moral distress is best achieved by
20 the creation of morally habitable workplaces, where possible triggers can be
21 identified and avoided. Structured undergraduate ethics education and accessible
22 postgraduate training and resources could provide a meaningful opportunity to
23 support pharmacists in exercising their moral competency or moral agency.

24 ***Conclusions***

25 Moral distress provides a reliable indicator of constraints – in the form of policies,
26 legislation, and regulations, and the structural and relational aspects of the working
27 environment in which pharmacists practise. This provides invaluable information in
28 the search for strategies to reduce the recurrence of this phenomenon.

29 **Introduction**

30 The term 'moral distress' was first coined by Jameton to describe the experience of
31 feeling unable to act in accordance with a moral judgment due to the presence of
32 constraints.¹ The experience of moral distress has since been characterised as a
33 distressing feeling of inner discordance or sense of fractured integrity that occurs
34 when an individual's personal or professional values are compromised due to their
35 action or inaction.² Moral distress can be differentiated from feelings of moral
36 uncertainty and moral dilemma, which are characterised by feelings of indecision, by
37 the presence of certitude regarding the morally required action.²

38 Although the phenomenon of moral distress was initially delineated within the
39 nursing literature, the concept has since been identified as relevant to a broad range
40 of healthcare professions.³⁻¹⁰ Studies have identified the situational binds created by
41 legislation, regulation, and policy as a potential cause of moral distress, alongside
42 internal constraints such as fear and self-doubt.¹¹⁻¹³ Furthermore, moral theorists
43 have noted the impact of the relational and socio-political forces that characterise the
44 workplace, including the inherent power asymmetries and relational structures that
45 can serve to either support or constrain individuals from enacting their moral
46 agency.¹⁴

47 Moral distress has been found to engender significant physical, emotional, and
48 psychological consequences for the individual concerned, including headaches,
49 fatigue, nausea, and insomnia, and feelings of anger, frustration, anxiety, sadness,
50 guilt, hopelessness and powerlessness.¹⁵ Moral distress has also been associated
51 with occupational attrition and an intention to leave healthcare professions.¹⁶⁻¹⁸

52 Preliminary research concerning moral distress amongst UK-based community
53 pharmacists identified three broad areas of practice associated with this experience:
54 legislative constraints; challenges to professionalism; and commercialism.¹⁹ With
55 regards to legislative constraints, the highly-regulated environment of pharmacy
56 practice was found to engender situations in which pharmacists felt unable to act in
57 accordance with their professional or personal values. Frequently cited examples
58 included feeling unable to lawfully dispense a controlled drug despite the belief that
59 to do so was in the patient's interest, and feeling compelled to provide emergency
60 hormonal contraception (EHC) despite this conflicting with personal beliefs. The

61 theme 'challenges to professionalism' concerned the experience of feeling unable to
62 assert professional judgement in the face of disagreement from others. This
63 experience was associated with the ongoing shift towards collaborative models of
64 care that increasingly position community pharmacists within complex intra and inter-
65 professional hierarchies and relational networks with pharmacy and non-pharmacy
66 colleagues, health professionals, and patients and customers. Moral distress was
67 found to arise when pharmacists felt unable to successfully navigate these relational
68 and organisational binds and ultimately acted against their professional judgement.
69 The commercial nature of community pharmacy and the perceived pressure to
70 prioritise the generation of revenue over customer needs was also cited as a
71 potential source of ethical incongruence.

72 This study aimed to explore the incidence of moral distress experienced by UK
73 community pharmacists. This was achieved by the deployment of a previously
74 developed and validated survey instrument to a national sample.

75 **Methods**

76 Ethical approval for this study was granted by the University of Hertfordshire
77 Research Ethics Committee (Protocol Approval Number: LMS/SF/XX/00006). The
78 instrument was distributed as a self-administered online survey via the Pharmacy
79 Defence Association's (PDA) mailing list. The PDA is an independent, not-for-profit
80 representative organisation for pharmacists. Its membership spans a number of
81 demographic groups, including the self-employed, pharmacy owners, and the
82 employees of both small and national pharmacy chains.

83 The survey is comprised of thirteen items relating to the themes and practice
84 scenarios previously identified as sources of moral distress for UK community
85 pharmacists.^{19,20} Each item asks the same question, "Have you ever experienced
86 moral distress as a result of a situation that could be described in the following
87 way?", before presenting a practice scenario in a single statement (**Figure 1**).

88 Participants were required to rate each item for both frequency and intensity using a
89 seven-point Likert Scale. A list of items and statements are provided in **Table 1**. The
90 instrument has previously demonstrated good levels of internal consistency for both
91 frequency and intensity subscales.¹⁹ Principle component analysis (PCA) indicated

92 that the data yielded by each subscale is unidimensional and representative of a
93 single underlying construct.

Controlled Drugs

Have you ever experienced moral distress as a result of a situation that could be described in the following way?

Being unable to dispense a controlled drug in the best interests of a patient due to an unmet legal requirement.

Frequency

Never	Once a year or less	Several times a year	Several times a month	Several times a week	Several times a day	Several times an hour
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Intensity

None	Mild	Mild to Moderate	Moderate	Moderate to Severe	Severe	Overwhelming
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

94

95 **Figure 1: Item 1 (Controlled Drugs) as it appears on the online pilot survey for the**
96 **questionnaire. Matching 7-point Likert scales for each of the two dimensions in which**
97 **moral distress is to be measured are included for each of the 13 items.**

98

99 Data analysis included simple descriptive statistics and statistical analysis. The
100 descriptive statistics included basic frequencies with regards to frequency and
101 intensity scores. The Likert item data was considered to be ordinal and as such did
102 not meet the assumptions required for parametric data analysis (e.g. ANOVA). Non-
103 parametric tests including Mann-Whitney,²¹ Kruskal-Wallis,²² and Jonckheere-
104 Terpstra,²³ were subsequently employed to explore the impact of the demographic
105 variables. Stepdown stepwise analyses were used to further investigate statistically
106 significant differences between groups.²⁴

107 Data generated from survey instruments of this type can be interpreted using either
108 individual or cumulative scoring. We have previously contended that due to the
109 nature of Likert-type scales, the later approach is often invalid as the differences
110 between scale intervals cannot be precisely quantified.¹⁹ Furthermore, two identical
111 cumulative scores can be derived from significantly different sets of sub-scores. The
112 frequency and intensity subscales were intended to capture data regarding different
113 dimensions of moral distress and were subsequently analysed separately. Each of

114 the thirteen items of this questionnaire is reported separately, and items measuring
115 the moral distress associated with different themes in the same category are
116 considered and compared so as to give the most meaningful interpretation of the
117 data with a view to determining which aspects of practice cause the greatest degree
118 of moral distress to this professional group.

119 **Results**

120 ***Response rate***

121 An e-mail inviting pharmacists to participate was successfully delivered to the
122 mailboxes of 20,433 recipients in August 2014. Participants were first required to
123 open the email, and then to click on a hyperlink to access the on-line survey. The
124 survey could only be completed once from each e-mail address, and remained live
125 for one month. An email reminder to complete the survey was sent out two weeks
126 after the initial invite. 1618 (7.9%) of the email recipients clicked through to the
127 survey. The expected response, based on experiential data from the PDA, was
128 approximately 450 (2.2%). A total of 1340 (82.8%) pharmacists went on to the
129 survey. Some 421 respondents indicated that they primarily worked in areas other
130 than community pharmacy (hospital, industry, academia, or primary care) and were
131 subsequently parsed from the sample. Inspection of text responses in the additional
132 comments section highlighted a concern that the frequency Likert scale descriptors
133 did not facilitate accurate recording of data for those working on a part-time basis. To
134 ensure accurate representation of frequency of occurrence the sample was restricted
135 to full-time pharmacists and a further 326 part-time pharmacists were subsequently
136 parsed. The final sample of full-time community pharmacists retained for the final
137 analysis totalled 593. At the time the survey was distributed, there were
138 approximately 47,000 registered pharmacists in Great Britain.²⁵

139 ***Demographics***

140 The demographic characteristics of the sample are displayed in Error! Reference
141 source not found.. A chi-square goodness-of-fit test revealed a significant difference
142 in the proportion of males (47.6%) and females (51.1%) in the sample as compared
143 to the ratio (3:2) documented in the General Pharmaceutical Council (GPhC)
144 registrant survey ($\chi^2 = 16.410$, $df = 1$, $p = <.001$),²⁶ indicating that females were
145 underrepresented within the sample population. Significant differences were also

146 revealed between the proportion of pharmacy owners in the sample (0.9%) as
147 compared to that documented in pharmacy registrant survey (11%) ($\chi^2 = 59.864$, $df =$
148 2 , $p < .001$). The under-representation of pharmacy owners within the sample may be
149 reflective of relatively fewer pharmacy owners subscribing to the PDA due to its
150 organisational focus on the needs of pharmacy employees and locums.

151 The internal consistency of the subscales was reassessed using Cronbach's alpha
152 coefficients.²⁷ Both the frequency (Cronbach's $\alpha = 0.837$) and intensity subscales
153 (Cronbach's $\alpha = 0.854$) were found to have a high level of internal consistency.
154 Inspection of the item total correlations did not reveal any items for which deletion
155 would have substantially improved scale reliability, consistent with results published
156 following the development of the tool.²⁰

157 Jonckheere-Terpstra tests for ordered alternatives showed that gender was not
158 found to significantly influence the frequency or intensity with which respondents'
159 experienced moral distress across any of the item scenarios.

160 Pharmacists working in locum roles were found to experience more frequent and
161 more intense moral distress in relation to customer pressure, emergency supply, and
162 whistleblowing, compared to both employee pharmacists and pharmacy owners.

163 There was a statistically significant downward trend in median moral distress scores
164 as age and years of experience increased. A marked decrease in both frequency
165 and intensity scores in relation to age was observed, with the exception of items
166 concerning the frequency of EHC-related distress and the intensity of distress
167 associated with the inefficient use of NHS resources intensity, both of which were
168 universally low. A downward trend was also observed in relation to years of post-
169 qualification experience for all moral distress frequency and intensity scores, except
170 items concerning both the frequency and intensity of distress associated with
171 divulgence of confidential information, and the intensity of distress related to NHS
172 resources. Again, these items scored low across all experiential groups. This
173 indicates that younger pharmacists and those with less experience typically feel
174 moral distress significantly more frequently and with greater intensity than their older
175 and more experienced colleagues.

176 ***Most distressing scenarios***

177 The item with the highest median frequency score and the highest median intensity
178 score concerned time constraints, with moderate-to-severe moral distress being
179 reported in relation to this scenario several times a day (**Tables 3 and 4**). It is
180 notable that 14% of respondents rated the distress associated with this scenario as
181 overwhelming. Being unable to dispense a controlled drug in the best interests of a
182 patient due to an unmet legal requirement was found to typically generate moderate
183 levels of moral distress several times a month. Three scenarios which fell under a
184 general theme of challenges to professionalism (i.e. Asserting Professional
185 Judgement; Patient Autonomy; and Whistleblowing, **Table 1**) were found to generate
186 moderate levels of moral distress at a frequency of several times a year. The
187 practice of “linked selling” of products was also found to provoke moderate levels of
188 moral distress several times a year.

189 ***Least distressing scenario***

190 The lowest median frequency and intensity scores were generated by the item
191 concerning the issue of EHC; with respondents indicating this scenario did not
192 typically arise, nor generate any distress when it did occasionally do so.

193 **Discussion**

194 ***Response rate***

195 The analysis of the results highlighted several limitations inherent with the
196 distribution of surveys via mailing list. We were unable to determine how many of the
197 20,000 pharmacists to whom the invitation to participate was sent received or
198 opened the e-mail: however, we were able to show that, of the 1,600 pharmacists
199 who subsequently opened the survey, 83% completed it. This compares very
200 favourably with the reported average (2.2%) There are a very small number of
201 organisations in the UK that retain a mailing list containing significant numbers of
202 pharmacists, and those that do are very protective of them. The GPhC, for example,
203 maintain a mailing list of all registrants: however, they limit its use to GPhC business
204 (e.g. informing registrants to renew their licensure) and research that they have
205 commissioned. The phenomenon of survey fatigue is cited in the literature as being
206 responsible for increasing rates of refusal,²⁸ and so it is understandable that

207 organisations that use mailing lists as part of their business are reticent to share
208 these resources.

209 ***Locum pharmacists***

210 Locum pharmacists were found to experience more frequent and more intense moral
211 distress in relation to distressing scenarios compared to both employee pharmacists
212 and pharmacy owners. The transitory nature of locum contracts may serve to expose
213 locum pharmacists to an increased susceptibility to situational pressures and
214 organisational demands, due to a heightened levels of personal risk associated with
215 asserting oneself in each new workplace. It is also possible locums are unable to
216 engage in the process of socialisation and habituation to individual workplace
217 environments and cultures, engendering a more acute awareness and sensitivity to
218 suboptimal practices, and thereby increasing the frequency with which moral
219 impasses are encountered. The Public Interest Disclosure Act 1998 does provide
220 legislative protection for whistleblowers:²⁹ however locum pharmacists remain
221 vulnerable due to the difficulty in establishing causation in respect of lost or reduced
222 employment opportunities. The *Freedom to Speak Up* report highlighted the
223 difficulties experienced by locum practitioners in respect of raising concerns
224 regarding practices that occur within the NHS.³⁰ Locum workers have previously
225 been found to experience isolation and marginalisation within the workplace, and are
226 less likely to have established relational networks within the workplace from which to
227 access support and guidance.³¹

228 ***Age and years of experience***

229 The demographic categories of “age” and “years of post-qualification experience”
230 represent associated – although not analogous – dimensions, and it is unsurprising
231 that a parallel trend emerged across the data set in relation to both factors. The
232 finding that younger pharmacists and those with less experience typically feel moral
233 distress significantly more intensely than their older and more experienced
234 colleagues is consistent with the trend for age previously reported by Kalvemark
235 Sporrang et al. for Swedish pharmacists and physicians.^{8,32} This is also aligned with
236 Haddad’s finding that younger and less experienced pharmacists are more likely to
237 encounter ethical problems relating to their work and experience greater difficulty in
238 resolving such issues.³³ Although Haddad’s study does not directly consider moral

239 distress, it can be argued that pharmacists that encounter more frequent ethical
240 dilemmas and attribute greater difficulty to securing a satisfactory resolution are at
241 an increased risk of moral distress. The qualitative data gathered during the earlier
242 phase of the current study identified age and relative inexperience as an issue that
243 was seen to work against pharmacists and add to the situational pressures they
244 experienced.¹⁹ Novice pharmacists also spoke of the risk of being ostracised by their
245 colleagues at a time in their professional life when support and guidance was most
246 crucial. This reflects existing research indicating that novice community pharmacists
247 report feeling isolated from their peers and lacking the skills and confidence to
248 effectively influence colleagues and exercise their autonomy.³⁴

249 The evidence concerning age and post-qualification experience in the context of
250 other healthcare disciplines is mixed. Several authors have reported a positive
251 correlation between moral distress scores and years of post-qualification
252 experience,^{17,35} whilst others have found no such correlation in respect of years of
253 post-qualification experience or age.³⁶ None have reported a negative correlation as
254 observed in this study. The evidence supporting a positive correlation between these
255 factors was used to underpin Epstein and Hamric's model of moral distress known
256 as 'the crescendo effect'.³⁷ The model predicts a longitudinal increase in moral
257 distress intensity over time as each new experience adds cumulatively to the
258 unresolved emotional residue from previous experiences. The trend concerning age
259 and years of post-qualification that emerged within the current study is incompatible
260 with this model. The Crescendo Model was developed as an explanatory model
261 based upon the findings of several studies exploring moral distress in the context of
262 critical care nursing. It is likely that the nature of the care provided within critical care
263 units positions nurses in exceptionally close spatial-temporal proximity to patients.
264 This level of proximity may not allow nurses to morally disengage to the same
265 degree as community pharmacists occupying less intimate roles. An inability to adopt
266 strategies by which to reduce the inner dissonance experienced due to moral
267 distress may account for the cumulative effect described by the model. Community
268 pharmacists typically occupy positions and work within environments that position
269 them at the opposite end of the spatial-temporal continuum. Previous research has
270 drawn attention to the notable isolation that community pharmacists experience in
271 their relationships with peers, other healthcare professionals, and patients and

272 customers.³⁸ This isolation is believed to be exacerbated by the relatively remote and
273 largely solitary working conditions that characterize community pharmacies and the
274 largely transient nature of the interactions between pharmacists and patients or
275 customers. This has raised concerns that this sense of isolation may prevent the
276 development of meaningful ethical discourse among community pharmacists, and
277 contribute to a perceived lack of proximity to patients and customers. It is possible
278 that these factors work to facilitate ethical disengagement in response to the
279 experiences of moral distress.

280 One possible explanation for the reduction on moral distress among older
281 pharmacists is that, as age and years of tenure increase, there is a corresponding
282 growth in professional and ethical competence.³⁹⁻⁴¹ This ethical development may
283 enable pharmacists to overcome the situational binds they experience more
284 effectively. As experience increases, it is also likely that the individual is afforded
285 some degree of career progression, which may in turn serve to lessen the intensity
286 and breadth of the relational and situational constraints they perceive to be inherent
287 within the workplace. These factors may combine to lessen the incidence with which
288 pharmacists feel unable to act in accordance with their judgement and subsequently
289 reduce the frequency with which they experience moral distress. Alternatively, it is
290 possible that as newly-qualified pharmacists enter the environment of the workplace
291 and encounter repeated experiences of moral distress they begin to employ self-
292 protective strategies to lessen the emotional impact of failing to enact their moral
293 judgements in practice. Strategies such as ethical desensitisation and dissonance
294 reduction may offer a mechanisms by which to maintain a sense of positive self-
295 regard despite repeated exposure to scenarios evoking moral compromise.^{42(p. 10)}
296 This interpretation suggests that the negative correlation observed across the data
297 set is due to increasing ethical disengagement as opposed to increasing ethical
298 competency.

299 The existing moral distress and pharmacy ethics literature lends greater support to
300 the latter explanation. Wilkinson has previously reported that repeated exposure to
301 experiences of moral distress led nurses to cultivate a sense of detachment from
302 their work as a mechanism to restore and preserve their psychological equilibrium
303 and minimise future experiences of distress.⁴³ The *Grounded Theory of Moral*
304 *Reckoning* has also drawn attention to the impact of moral distress upon the ethical

305 identity of novice practitioners as they underwent a process of professional
306 socialisation within the workplace and habituation into their new role.⁴⁴ Experiences
307 of moral distress engendered a stage of reflection in which practitioners sought to
308 make sense of, and accommodate, the discrepancies between their personal and
309 professional values and their behaviour in practice. Kelly noted a stage of
310 disorientation in which novice practitioners struggled to assimilate the professional
311 ideals advocated during their training with the realities of the workplace.⁴⁵ The
312 perceived importance of establishing and maintaining positive and supportive
313 relationships within the workplace during this stage of professional development was
314 believed to heighten the challenge of adhering to previously established professional
315 values. Kelly described an ongoing process of rationalization in which practitioners
316 revised and amended their professional identity and values in order to bridge the
317 perceptual gap between their previous conception of a good practitioner and the
318 reality of their practice. The *Personal Ethical Threshold* model formulated by Comer
319 and Vega draws attention to the role that protective psychological strategies play in
320 enabling individuals to maintain a sense of integrity whilst accommodating behaviour
321 that was previously perceived to be unethical.⁴² These mechanisms facilitate the
322 reinterpretation or reframing of ethical issues as less significant or morally intense,
323 whilst the repetitive engagement in moral transgressions enables a process of
324 desensitisation and acclimatisation to behaviour previously considered to wrong.

325 Latif has previously posited that the retrogressive trend in moral reasoning scores
326 amongst US community pharmacists was indicative of a process of occupational
327 socialisation that undermined pharmacists' ability to recognise and evaluate the
328 ethical aspects of their practice.⁴⁶ This research reasoned that pharmacists who
329 chose to remain in community pharmacy began to cultivate a stance of ethical
330 ambivalence and experienced a reduction in ethical cognition as a mechanism of
331 adapting to the competing tensions of professional and commercial values that
332 characterised the retail sector. Themes of ethical insensitivity and disengagement
333 have also previously been identified in relation to community pharmacists practicing
334 in the UK: Cooper, Bissell and Wingfield highlighted examples of ethical
335 inattentiveness, moral deference, ethical passivity, and a failure to consider the
336 ethical dimensions of daily practice;³⁸ and Deans has identified a lack of ethical
337 literacy and engagement amongst UK pharmacists.⁴⁷

338 The development of moral competency would be expected to reduce the frequency
339 with which pharmacists experience moral distress, while having little effect on its
340 intensity. A reduction in sensitivity caused by disengagement would have the effect
341 of reducing both intensity and frequency. The reduction in intensity scores observed
342 here suggests, rather, that there is a perceived decrease in the moral significance of
343 the scenario, which is indicative of the processes of dissonance reduction and moral
344 desensitization outlined by Cromer and Vega.⁴²

345 ***Time constraints***

346 The results indicate that time constraints represent the greatest source of moral
347 distress for UK community pharmacists. This finding reflects those previously
348 reported by Corley,⁴⁸ who noted that workload pressures yielded the highest
349 frequency and intensity scores in a study of critical care nurses. Previous research
350 indicated that time constraints for community pharmacists are related to the parallel
351 pressures of managing a high dispensing workload whilst also meeting targets
352 concerning pharmaceutical services and commercial revenue.¹⁹ Participants in semi-
353 structured focus groups discussed how feeling unable to provide optimal patient care
354 is associated with a sense of compromised professional identity and integrity and a
355 concern for the efficaciousness and safety of the services provided within the
356 pharmacy. This issue has been framed as one of substantial moral intensity due to
357 the potential for significant harm to occur, particularly in the form of medication
358 errors. It is possible that high workloads also serve to exacerbate the frequency with
359 which moral distress is experienced in relation to other practice scenarios by
360 reducing the time that is available to consider, resolve, and reflect upon ethical
361 difficulties that are identified.

362 ***Possible remedies***

363 A reduction in the intensity of moral distress is not necessarily indicative of an
364 increased ability to resolve moral conflicts, and may instead reflect reduced
365 sensitivity to the moral dimensions of practice, a retrogression in reasoning skills,
366 and moral disengagement. As such, the aim of any proposed interventions should
367 not be solely to effect a reduction in the triggers for moral distress, nor to provide
368 practitioners with strategies to cope with repeated experiences of moral compromise:
369 rather, it should seek to enable systemic developments that promote moral

370 competency, support the enactment of moral agency, and enhance the moral
371 habitability of community pharmacy environments.

372 ***Ethical Environment***

373 The scenario that generated both the highest frequency and the highest intensity of
374 distress was that involving time constraints. This is in spite of the introduction of
375 standards, which mandate governance arrangements safeguarding the health, safety
376 and wellbeing of patients and the public.⁴⁹ Standards of this type set the minimum
377 requirements against which pharmacy owners may be held accountable: however,
378 each business-owner is responsible for ensuring the safe and effective provision of
379 pharmacy services and the extent to which they wish to extend beyond the
380 benchmark. Community pharmacies in the UK are businesses, which are paid to
381 provide services to the National Health Service (NHS) under a standard contract.
382 Pharmacies are generally paid on the basis of the number of service units provided
383 (e.g. number of prescribed items dispensed; number of Medicines Use Reviews
384 carried out). This necessarily creates a dilemma between providing maximum levels
385 of patient care and maximising the profits of the business.

386 The General Pharmaceutical Council (GPhC), which regulates the profession of
387 pharmacy in Great Britain, has recently updated their standards for registered
388 pharmacies and published guidance concerning safe and effective pharmacy
389 teams.⁵⁰ The guidance outlines the responsibility of pharmacy owners and directors
390 in creating a working environment and culture that empowers pharmacists to
391 demonstrate their professionalism and raise concerns in the absence of
392 compromising targets and incentives. Although the guidance refers to the provision
393 of appropriate staffing levels and skill mix, it stops short of establishing minimum
394 staffing levels. Given the frequency and intensity of distress associated with time
395 constraints and rising workloads, further evaluation of this issue and the degree of
396 autonomy afforded to pharmacy owners and directors in this regard is warranted.

397 EHC was found to generate low levels of moral distress in terms of both frequency
398 and intensity. At the time this research was carried out, the GPhC provided guidance
399 for registrants which required those not wishing to supply EHC to refer patients to
400 “an alternative appropriate source of supply available within the time limits for EHC
401 to be effective”.⁵¹ Earlier, qualitative research among UK community pharmacists
402 highlighted several potential barriers to enacting the conscience clause, including:

403 the timing of the customer's request and likelihood that they would be able to access
404 alternative services; unsupportive co-workers or managers; and a fear of negative
405 reprisals.¹⁹ This has not been reflected in the levels of moral distress associated with
406 this scenario, which is low among all groups, irrespective of their religious affiliation.

407 In 2017 the GPhC published new guidance which stipulated that pharmacists must
408 *"take responsibility for ensuring that person-centred care is not compromised*
409 *because of personal values and beliefs"*.⁵² The revised guidance does not prevent
410 pharmacists from being able to refer patients or customers to an alternative
411 pharmacist or pharmacy provider, however, they will only be able to do so when this
412 course of action does not hinder or deny the individuals access to person-centred
413 care. The proposals signify a significant shift that places additional emphasis upon
414 the needs and rights of the patient and adds a further qualification upon the
415 circumstances in which pharmacists may decline to provide services based upon
416 their religion, personal values and beliefs. The amended guidance places an onus
417 upon pharmacy professionals to avoid placing themselves in situations "where
418 refusal to provide services would result in a person not receiving the care or advice
419 they need". The guidance emphasises the need for pharmacy professionals to be
420 open with their employer and proactive in terms of making them aware of any
421 personal values or beliefs that prevent them from providing certain pharmacy
422 services. If pharmacists are to assume greater levels of personal responsibility with
423 regards to proactively managing the occurrence of prospective value conflicts, this
424 must be accompanied by a corresponding duty levied upon employers to create
425 morally habitable workplaces in which open communication regarding religious
426 affiliation, personal values, and beliefs are encouraged, respected, and fairly
427 accommodated.

428 **Education**

429 Educating students and pharmacists about the issue of moral distress and its
430 characteristics would enable practitioners to recognise and identify experiences of
431 moral distress as they arise. Two temporal aspects of moral distress have been
432 identified: initial distress and reactive distress.² Initial distress is experienced at the
433 time that the individual becomes cognizant of feeling constrained from acting on their
434 moral judgement and is typically characterised by feelings of acute anxiety,
435 frustration, anger and outrage. Reactive distress is experienced in instances

436 whereby attempts to resolve the identified conflict or circumnavigate the constraints
437 are unsuccessful, and the individual ultimately enacts the behaviour that they
438 believed to be wrong and is characterised by enduring feelings of guilt, low self-
439 esteem and powerlessness.

440 An ability to recognise initial moral distress provides opportunity for purposeful
441 reflection, evaluation, and intentional action, thereby potentially reducing the
442 frequency with which reactive distress is encountered. Several approaches and tools
443 have been developed to assist and guide practitioners through real time experiences
444 of moral distress.^{53,54} Awareness of these approaches may enable practitioners to
445 more proactively and effectively address experiences of moral compromise without
446 employing the protective strategies of desensitisation and moral disengagement.
447 Although moral distress was found to be most prevalent amongst newly-qualified
448 pharmacists, the implications and strategies remain relevant for pharmacists at all
449 stages of their working lives. As such, the scope and opportunity for accessible
450 postgraduate training and resources concerning this area of interest warrants
451 consideration by educational institutions.

452 Commentators, such as Wintrup, have criticised undergraduate training programmes
453 for focusing upon moral theory at the expense of preparing graduates for the ethical
454 tensions they are likely to encounter within the workplace.⁵⁵ It is argued that current
455 educational approaches enhance students' abilities in respect of identifying ethical
456 concerns and formulating reasoned arguments about how they ought to respond, but
457 that it does not equip students with the necessary skills to enact the requisite action
458 in practice. Reasoned judgement does not reliably equate with congruent action, and
459 that even those practitioners who exhibit morally sensitivity and possess intact
460 reasoning skills may struggle to act in accordance with what they believe to be right.
461 The longitudinal trend revealed within this study indicates that newly-qualified
462 pharmacists experience more frequent and intense experiences of moral distress
463 than their more experienced colleagues. It has been argued that newly-qualified
464 pharmacists are particularly vulnerable to experiences of moral distress due to the
465 nature and scope of the situational pressures and personal risks they face in taking a
466 stand during this transitional phase of their professional life. This finding poses
467 implications for pharmacy education and indicates that pharmacy educators may be

468 ideally situated to support prospective pharmacists in developing the requisite skills
469 necessary to enact morally congruent action in practice.

470 Truog et al. have argued for the inclusion of more embedded approaches to ethical
471 analysis within medical education programmes.⁵⁶ Such approaches consider not only
472 the 'outside in' perspective of traditional theoretical analysis, but also the 'inside out'
473 view that sheds light on the evolving relational space that occurs between relevant
474 actors as each unique situation unfolds. Conceptualising the 'inside out' enables
475 consideration of theory within the context of practice, and provides opportunity for
476 students to identify and consider the dynamic influence of situational and relational
477 pressures on subsequent behaviour. Situating ethical issues in the context of where
478 they unfold is also advocated by Wintrup.⁵⁵ Situated analysis expands the locus of
479 evaluation to include the structural properties of the environment, the distribution of
480 power, and the social processes that bear influence over the agent. It is argued that
481 a more in-depth understanding of the ways in which these aspects operate enables
482 agents to not only navigate these forces with greater fluency, but to influence and
483 direct interactions and situations more effectively, engendering less incidence of
484 moral compromise. The process of guided introspection encourages students to not
485 only become more ethically sensitive, but more ethically self-aware. Gentile suggests
486 that students are provided with structured opportunities to develop and practice
487 arguments, positions, and scripts that they can utilise and draw upon in scenarios
488 that are anticipated to provoke compromise.⁵⁷ Rehearsing a stance that is consistent
489 with professional values has been found to render the skills and behaviour
490 necessary to enact a position of integrity during instances of threat more accessible
491 to the individual.⁵⁸

492 Experiences of moral distress are grounded within the relational constraints that
493 characterise the workplace. Divisions, conflict, and power imbalances, both within
494 and between professions, impede meaningful dialogue and act as a barrier to safe
495 comprehensive patient care. A greater level of inter-professional collaboration may
496 serve to increase the ease with which such disputes are raised and resolved, whilst
497 lowering incidence of moral distress and improving patient care. The recent policy
498 initiatives to integrate pharmacy services into primary care settings and G.P.
499 practices are evidence of a growing shift towards collaborative working. The
500 introduction of inter-professional undergraduate ethics education sessions and inter-

501 professional ethics initiatives has also been proposed as a means of improving inter-
502 disciplinary communication, facilitating shared understanding, and reducing
503 professional isolation.⁵⁹

504 **Conclusions**

505 Austin has likened moral distress to an “ethical canary”, which offers a warning as to
506 presence of misaligned values, systems, or practices.⁶⁰ Moral distress provides a
507 reliable indicator of constraints – in the form of policies, legislation, and regulations,
508 and the structural and relational aspects of the working environment in which
509 professionals practice. Improvements are needed in respect of the moral habitability
510 of the community pharmacy workplace, including reconsideration of workload and
511 staffing levels, to enable community pharmacists to enact person-centred practice
512 within the confines of the current regulatory framework. Additionally, pharmacy
513 curriculums with an increased emphasis on developing moral competency or moral
514 agency, as described by Latif and others,^{46,61} together with strong inter-professional
515 communication, should be considered as a means to reducing the incidence of moral
516 distress. This requires a systemic approach to further enquiry and evaluation that
517 seeks to promote the competency and confidence of pharmacists as moral agents
518 whilst addressing the structural barriers to morally congruent practice.

519

520 **References**

- 521 1. Jameton A. *Nursing Practice: The ethical issues*. Englewood Cliffs: Prentice-
522 Hall.; 1984.
- 523 2. Jameton A. Dilemmas of moral distress: moral responsibility and nursing
524 practice. *AWHONN's clinical issues in perinatal and women's health nursing*.
525 1993;4(4):542-551.
- 526 3. Austin WJ. Moral Distress and the Contemporary Plight of Health
527 Professionals. *HEC Forum*. 2012;24(27-38).
- 528 4. Austin WJ, Bergum V, Goldberg L. Unable to answer the call of our patients:
529 mental health nurses' experience of moral distress. *Nursing Inquiry*.
530 2003;10(3):177-183.

- 531 5. Crnjanski T, Krajnovic D, Stojkov-Rudinski S, Tadić I. Ethical dilemmas and
532 moral distress in pharmacy: A qualitative study. *HealthMed*. 2012;6(7):2485-
533 2493.
- 534 6. Førde R, Aasland OG. Moral distress among Norwegian doctors. *Journal of*
535 *Medical Ethics*. 2008;34:521-525.
- 536 7. Gutierrez K. Critical Care Nurses' Perceptions of and Responses to Moral
537 Distress. *Dimensions of Critical Care Nursing*. 2005;24(5):229-241.
- 538 8. Källemark Sporrang S, Höglund AT, Hansson MG, Westerholm P, Arnetz B.
539 "We are White Coats Whirling Round" – Moral Distress in Swedish
540 Pharmacies. *Pharmacy World and Science*. 2005;27(3):223-229.
- 541 9. Losa Iglesias ME, Vallejo RB, Salvadores Fuentes P. Moral distress related to
542 ethical dilemmas among Spanish podiatrists. *Journal of Medical Ethics*.
543 2010;36:310-314.
- 544 10. Schwenzer K, Wang L. Assessing moral distress in respiratory care
545 practitioners *Critical Care Medicine*. 2006;34(12):2967-2973.
- 546 11. Nathaneil AK. Moral reckoning in nursing. *Western Journal of Nursing*
547 *Research*. 2006;28(4):439-448.
- 548 12. Austin WJ, Kagan L, Rankel M, Bergum V. The balancing act: psychiatrists'
549 experience of moral distress. *Medicine, Health Care and Philosophy*.
550 2008;11(1):89-97.
- 551 13. Austin WJ, Rankel M, Kagan L, Bergum V, Lemermeyer G. To Stay or To Go,
552 To Speak or Stay Silent, To Act or Not To Act: Moral Distress as Experienced
553 by Psychologists. *Ethics & Behavior*. 2005;15(3):197-212.
- 554 14. Peter E. Fostering Social Justice: The Possibilities of a Socially Connected
555 Model of Moral Agency. *Canadian Journal of Nursing Research*.
556 2011;43(2):11-17.
- 557 15. Burston AS, Tuckett AG. Moral distress in nursing: contributing factors,
558 outcomes and interventions. *Nursing Ethics*. 2013;20(1):312–324.
- 559 16. Corley MC. Nurse Moral Distress: a proposed theory and research agenda.
560 *Nursing Ethics*. 2002;9(6):636-650.
- 561 17. Hamric AB, Blackhall LJ. Nurse-physician perspectives on the care of dying
562 patients in intensive care units: Collaboration, moral distress, and ethical
563 climate. *Critical Care Medicine*. 2007;35(2):422-429.

- 564 18. Hamric AB, Borchers CT, Epstein EG. Development and Testing of an
565 Instrument to Measure Moral Distress in Healthcare Professionals *AJOB*
566 *Primary Research*. 2012;3(2):1-9.
- 567 19. Astbury JL, Gallagher CT. Development and validation of a questionnaire to
568 measure moral distress in community pharmacists. *International Journal of*
569 *Clinical Pharmacy*. 2015;39(156-164).
- 570 20. Astbury JL, Gallagher CT, O'Neill RC. The issue of moral distress in
571 community pharmacy practice: background and research agenda.
572 *International Journal of Pharmacy Practice*. 2015;23(5):361-366.
- 573 21. Mann HB, Whitney DR. On a Test of Whether one of Two Random Variables
574 is Stochastically Larger than the Other. *The Annals of Mathematical Statistics*.
575 1947;18(1):50-60.
- 576 22. Kruskal WH, Wallis WA. Use of Ranks in One-Criterion Variance Analysis.
577 *Journal of the American Statistical Association*. 1952;47(260):583-621.
- 578 23. Jonckheere AR. A Distribution-Free k-Sample Test Against Ordered
579 Alternatives. *Biometrika*. 1954;41(1/2):133-145.
- 580 24. Hocking RR. A Biometrics Invited Paper. The Analysis and Selection of
581 Variables in Linear Regression. *Biometrics*. 1976;32(1):1-49.
- 582 25. A Strategic Review of the Future Pharmacist Workforce: Informing pharmacist
583 student intakes. London: Centre for Workforce Intelligence; 2013.
- 584 26. Phelps A, Agur M, Nass L, Blake M. *General Pharmaceutical Council*
585 *Registrant Survey 2013*. London: General Pharmaceutical Council; 2014.
- 586 27. Kline P. *The Handbook of Psychological Testing*. 2nd ed: London: Routledge.;
587 1999.
- 588 28. Porter SR, Whitcomb ME, Weitzer WH. Multiple surveys of students and
589 survey fatigue. *New Directions for Institutional Research*. 2004(121):63-73.
- 590 29. Public Interest Disclosure Act 1998. Chapter 23. London: HMSO; 1998.
- 591 30. Francis R. *Freedom to speak up: an independent review into creating an open*
592 *and honest reporting culture in the NHS*. London: Department of Health; 2015.
- 593 31. Shann P, Hassell K. Flexible working: Understanding the locum pharmacist in
594 Great Britain. *Research in Social and Administrative Pharmacy*.
595 2006;2(3):388-407.
- 596 32. Källemark Sporrang S, Höglund AT, Bengt A. Measuring Moral Distress in
597 Pharmacy and Clinical Practice. *Nursing Ethics*. 2006;13(4):416-427.

- 598 33. Haddad. A. Ethical Problems in Pharmacy Practice: A Survey of Difficulty and
599 Incidence. *American Journal of Pharmaceutical Education*. 1991;55:1-5.
- 600 34. Magola E, Willis SC, Schafheutle EI. Community pharmacists at transition to
601 independent practice: Isolated, unsupported, and stressed. *Health & Social
602 Care in the Community*. 2018;26:849–859.
- 603 35. Elpern EH, Covert B, Kleinpell R. Moral distress of staff nurses in a medical
604 intensive care unit. *American Journal of Critical Care*. 2005;14(6):523-530.
- 605 36. Corley MC, Minick P, Elswick RK, Jacobs M. Nurse Moral Distress and Ethical
606 Work Environment. *Nursing Ethics*. 2005;12(4):381-390.
- 607 37. Epstein EG, Hamric AB. Moral Distress, Moral Residue, and the Crescendo
608 Effect. *Journal of Clinical Ethics*. 2009;20(4):330-342.
- 609 38. Cooper RJ, Bissell P, Wingfield J. 'Islands' and 'doctor's tool': the ethical
610 significance of isolation and subordination in UK community pharmacy.
611 *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and
612 Medicine*. 2009;13(3):297-316.
- 613 39. Latif DA. The influence of pharmacy education on students' moral
614 development at a school of pharmacy in the USA. *International Journal of
615 Pharmacy Practice*. 2009;17(6):359-363.
- 616 40. Sitkin SB, Sutcliffe SM. Dispensing legitimacy: the influence of professional,
617 organizational, and legal controls on pharmacist behavior. *Research in the
618 Sociology of Organizations*. 1991;8:269-295.
- 619 41. Gallagher CT. Assessment of levels of moral reasoning in pharmacy students
620 at different stages of the undergraduate curriculum. *International Journal of
621 Pharmacy Practice*. 2011;19(5):374-380.
- 622 42. Comer DR, Vega G. The Personal Ethical Threshold. In: Comer DR, Vega G,
623 eds. *Moral Courage in Organizations. Doing the right thing at work*. New York:
624 M.E. Sharp; 2011.
- 625 43. Wilkinson JM. Moral distress in nursing practice: experience and effect.
626 *Nursing Forum*. 1987/88;23:16-29.
- 627 44. Nathaniel AK. *A Grounded Theory of Moral Reckoning in Nursing* [PhD
628 Thesis]: School of Nursing, West Virginia University; 2003.
- 629 45. Kelly B. Preserving moral integrity: a follow up study with new graduate
630 nurses. *Journal of Advanced Nursing*. 1998;28(5):1134-1145.

- 631 46. Latif D. Ethical Cogntion and Selection-Socialization. *Journal of Business*
632 *Ethics*. 2000;25:343-357.
- 633 47. Deans Z. Ethical issues in pharmacy practice as discussed by pharmacists'.
634 *International Journal of Pharmacy Practice*. 2005;13:R95.
- 635 48. Corley MC, Elswick RK, Gorman M, Clor T. Development and evaluation of a
636 moral distress scale. *Journal of Advanced Nursing*. 2001;33(2):250-256.
- 637 49. General Pharmaceutical Council. Standards for registered pharmacies.
638 London: General Pharmaceutical Council; 2012.
- 639 50. General Pharmaceutical Council. Guidance to ensure a safe and effective
640 pharmacy team. London: General Pharmaceutical Council; 2018.
- 641 51. Guidance on the provision of pharmacy services affected by religious and
642 moral beliefs. London: General Pharmaceutical Council; 2010.
- 643 52. General Pharmaceutical Council. In practice: Guidance on religion, personal
644 values and beliefs. London: General Pharmaceutical Council; 2017.
- 645 53. Dudzinski DM. Navigating moral distress using the moral distress map.
646 *Journal of Medical Ethics*. 2016;42(5):321-324.
- 647 54. McCue C. Using the AACN framework to alleviate moral distress. *Online*
648 *journal of issues in nursing*. 2010;16(1):9.
- 649 55. Wintrup J. The changing landscape of care: does ethics education have a
650 new role to play in health practice? *BMC Medical Ethics*. 2015;16(1):22-29.
- 651 56. Truog RD, Brown SD, Browning D, et al. Microethics: The Ethics of Everyday
652 Clinical Practice. *Hastings Center Report*. 2015;45(1):11-17.
- 653 57. Gentile MC. Giving Voice to Values: Building Moral Competence. In: Comer
654 DR, G V, eds. *Moral Courage in Organisations. Doing the right thing at work*. .
655 New York: M.E.Sharpe; 2011.
- 656 58. Gentile MC. Keeping your colleagues honest. *Harvard Buisiness Review*.
657 2010;88(2):114-117.
- 658 59. Monrouxe LV, Rees CE, Endacott R, Ternan E. "Even now it makes me
659 angry": health care students' professionalism dilemma narratives. *Medical*
660 *Education*. 2014;48:502-517.
- 661 60. Austin WJ. Moral Distress and the Contemporary Plight of Health
662 Professionals. *HEC Forum*. 2012;24:27-38.

663 61. Gallagher CT. Building on Bloom: A paradigm for teaching pharmacy law and
664 ethics from the UK. *Currents in Pharmacy Teaching and Learning*. 2011;3:71-
665 76.
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Tables

Item	Scenario
1. Controlled Drugs	Being unable to dispense a controlled drug in the best interests of a patient due to an unmet legal requirement.
2. NHS	Being pressured to supply an expensive unlicensed medicine or formulation on an NHS prescription, rather than provide a cheaper, but equally appropriate, licensed alternative.
3. Asserting Professional Judgement	Dispensing a prescribed medication against my clinical judgement because I feel unable to challenge the prescriber.
4. Time Constraints	Being unable to provide the degree of patient care I would like due to time constraints.
5. Patient Autonomy	Supplying a medicine at the insistence of a customer though this conflicts with my professional judgement.
6. Linked Sales	Being pressured to offer related, but unnecessary, items for sale (i.e. linked selling) though I feel this is unprofessional.
7. Emergency Supply	Being unable to make an emergency supply in the best interests of a patient due to an unmet procedural requirement.
8. Off License	Being pressured by a patient to supply a medicine though I suspect it is likely to be used outside its licensed indications.
9. EHC	Dispensing emergency hormonal contraception though this conflicts with my moral beliefs.
10. Whistleblowing	Feeling unable to raise my concerns about the professional practice or competency of others.
11. Confidentiality	Being forced to breach patient confidentiality (e.g. by the police, or under terrorism legislation).
12. Commercial pressures	Being pressured by a customer to supply medicines that are less clinically-suitable due to the presence of financial incentives (e.g. buy one, get one free).
13. Unregulated products	Being expected to use my professional standing to promote or supply products that have not been proven effective (e.g. nutraceuticals), or that have been proven ineffective (e.g. homoeopathics).

Table 1: The thirteen scored items from the online survey, together with their single-statement scenarios.

Demographic**Gender:**

Female	303 (51.1%)
Male	282 (47.6%)
Missing	8 (1.3%)

Age (years):

25 and under	41 (6.9%)
26 – 35	197 (33.2%)
36 – 45	132 (22.3%)
46 – 55	143 (24.1%)
56 – 65	73 (12.3%)
Over 65	4 (0.7%)
Missing	3 (0.5%)

Area of work:

Community locum	155 (26.1%)
Community employee	433 (73%)
Pharmacy owner	5 (0.9%)
Missing	0 (0%)

Years of experience:

5 or less	129 (21.8%)
6 – 10	108 (18.2%)
11 – 15	80 (13.5%)
16 – 20	53 (8.9%)
21 – 25	221 (37.3%)
Over 25	2 (0.3%)
Missing	0 (0%)

Religious affiliation:

Christian	253 (42.7%)
Jewish	4 (0.7%)
Muslim	42 (7.1%)
Hindu	41 (6.9%)
Sikh	18 (3%)
Other	14 (2.4%)
None/no preference	172 (29%)
Prefer not to say	45 (7.6%)
Missing	4 (0.7%)

Table 2: Demographic characteristics of survey participants (n = 593).

Scenario	Scale descriptor							Missing
	Never	Once a year or less	Several times a year	Several times a month	Several times a week	Several times a day	Several times an hour	
Controlled Drugs	5%	21%	48%	18%	6%	2%	0%	0%
NHS	34%	22%	25%	12%	4%	2%	0%	1%
Asserting Professional Judgement	25%	23%	32%	11%	6%	2%	1%	0%
Time Constraints	2%	1%	8%	14%	22%	39%	14%	0%
Patient Autonomy	19%	19%	25%	18%	14%	5%	0%	1%
Linked Sales	32%	9%	17%	16%	13%	10%	4%	0%
Emergency Supply	19%	19%	25%	18%	14%	5%	0%	1%
Off Licence	16%	18%	31%	18%	10%	5%	1%	1%
EHC	85%	3%	3%	4%	3%	1%	0%	1%
Whistleblowing	25%	21%	23%	14%	10%	6%	2%	0%
Confidentiality	67%	24%	7%	1%	0%	0%	0%	0%
Commercial Pressures	47%	17%	17%	10%	6%	3%	1%	1%
Unregulated Products	47%	15%	15%	12%	8%	3%	1%	0%

Table 3: Table showing frequency of occurrence of moral distress caused by each scenario (n= 593; median category in bold).

Scenario	Scale descriptor							
	None	Mild	Mild to moderate	Moderate	Moderate to severe	Severe	Overwhelming	Missing
Controlled Drugs	7%	9%	12%	27%	31%	13%	2%	0%
NHS	34%	15%	17%	17%	10%	5%	1%	2%
Asserting Professional Judgement	23%	8%	10%	21%	22%	12%	4%	1%
Time Constraints	2%	2%	9%	19%	32%	21%	14%	0%
Patient Autonomy	17%	8%	13%	24%	22%	12%	4%	1%
Linked Sales	32%	9%	13%	14%	15%	9%	7%	2%
Emergency Supply	25%	11%	16%	20%	15%	9%	3%	2%
Off Licence	16%	16%	19%	21%	17%	8%	3%	1%
EHC	83%	3%	3%	3%	3%	2%	3%	3%
Whistleblowing	24%	8%	13%	14%	17%	15%	8%	0%
Confidentiality	65%	11%	5%	6%	5%	4%	2%	2%
Commercial Pressures	48%	15%	12%	13%	6%	4%	1%	1%
Unregulated Products	46%	14%	10%	12%	9%	4%	3%	2%

Table 4: Table showing intensity of moral distress caused by each scenario (n= 593; median category in bold).