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Why Tell Them How: Rethinking Autonomy and Informed Consent in Healthcare

Ahmed AlJuhani

Instilled in almost all our medical institutions and research centers is the requirement for physicians and investigators to obtain informed consent from patients and subjects before carrying out medical interventions. The requirement of informed consent has become so central to modern medical practice that its theoretical justification is rarely questioned by the general public[1]. But, within Bioethics, one recurring argument in its defence is that informed consent protects patients' autonomy – their capacity for self-determined action in the absence of controlling influences (Beauchamp and Childress 1985, 102). This is the view that Beauchamp (2010) defends. It is the view that I will argue against.

Beauchamp's defence of this view rests on a unique understanding of autonomy. He develops an account - called the "concise theory" – that takes autonomy to be a matter of degrees. Under the concise theory, actions are not defined in binary terms as either being autonomous or non-autonomous. Instead, they are only more or less autonomous depending on the extent to which they are (i) intentional, (ii) carried out with adequate understanding and (iii) in the absence of controlling influences (ibid., 65). In outlining this theory of autonomy, Beauchamp purports to have presented a clear definition of the term, one that makes explicit the conditions that lead to its realisation. He then moves on to demonstrate how informed consent protects autonomy by ensuring that these conditions are met.

In this article, I will argue against Beauchamp's claim that the requirement of informed consent protects autonomy through these conditions and should be justified on that basis. To do this, I will first show that the process by which we ensure the condition of adequate understanding does not protect patients' autonomy and can, in fact, contradict it. Secondly, I show how the remaining conditions of intentionality and the absence of controlling influences are insufficient in protecting patients' autonomy. Therefore, I conclude that informed consent does not always protect autonomy and should not be justified on the basis that it does.

This essay is structured as follows: in section 1, I review Beauchamp's argument, clarifying his notion of concise autonomy, and I illustrate how informed consent is thought to protect it. In section 2, I present two requirements determining whether (A) the condition of adequate understanding is satisfied and (B) whether the condition succeeds in protecting autonomy. The first requirement specifies what information should be understood for the condition of adequate understanding to be satisfied, while the second requirement specifies when satisfying this condition also protects a patient's capacity for autonomous action. I show that the first requirement can be met in ways that contradict autonomy, while the second cannot be said to have been met. After this is established, I go on to argue that informed consent does not necessarily protect autonomy. In section 3, I recap and conclude.

1 An illuminating exercise is to review surveys of clinician, patient, and public opinion about informed consent (to start with, see Singer 1993, El-Wakeel et al. 2006, and Riordan et al. 2015). It becomes apparent that few, if indeed any, survey opinions about why informed consent matters in the first place.

1. The Concise Theory of Autonomy and Its Relation to Informed Consent

The concise theory of autonomy takes the term to be non-binary: actions are neither autonomous nor non-autonomous, they are only more or less so. This sliding-scale notion of autonomy depends on the extent to which one's actions are (i) intentional, carried out with (ii) adequate understanding and (iii) in absence of controlling influences (Beauchamp 2010, 65). Beauchamp recognises that, for the theory to be workable, it would require a cut-off point where an action can safely be labelled autonomous or non-autonomous. Beauchamp argues (ibid., 71) that cut-off points should be determined according to context. Under this account, an action would be considered autonomous or non-autonomous in light of "specific objectives of decision making such as deciding about surgery, choosing a university to attend, and hiring a new employee" (ibid., 71).

Before I go on to show how informed consent is thought to protect autonomy through these conditions, we will have to take a closer look at what the concise theory entails. There are two points that are worth clarifying: first, how should we interpret to what each of the conditions laid out above – intentionality, adequate understanding and absence of controlling influence – amounts to? Second, how ought we to interpret the notion of cut-offs that Beauchamp describes? As Beauchamp (ibid., 71) recognises, establishing cut-offs is necessary for a workable notion of autonomy. In other words, it is imperative that we have a clear understanding of where we draw the line between autonomous and non-autonomous action. I will clarify both points below before I go on to elaborate Beauchamp's argument that informed consent protects autonomy.

1.1 Conditions of Autonomy: Intentionality, Adequate Understanding and the Absence of Controlling Influence

Let us begin with the condition of intentionality. Beauchamp describes an action as intentional if and only if it is willed according to a plan (Beauchamp 2010, 66). This does not necessarily imply that every intentional action will lead to a predicted outcome. Beauchamp (ibid., 67) accepts that even intentional action can occasionally tolerate undesirable consequences if they are a part of a more general plan (or, perhaps a tolerable feature of one). For example, if a patient decides to undergo a root canal treatment to relieve herself of recurring pain that is caused by a deep decay in her tooth, then the prospect of experiencing mild pain after a successful procedure is only a tolerable (though unfortunate) byproduct of her plans. If she does in fact suffer some pain after the procedure, then this is simply an undesirable part of her general plan to receive treatment.

Beauchamp's take on adequate understanding is more intricate. In his view, a patient must acquire "pertinent information and have relevant beliefs" (ibid., 68) about the nature and consequences of her actions. It's important to note that neither pertinence nor relevance imply perfection or completeness. A patient can have adequate understanding only by grasping some basic, material facts about the procedure (ibid.). If a patient decides to undergo a root canal treatment and authorises the dentist to carry out the procedure, she need only obtain some information about what this procedure entails: for example, whether a dental x-ray is required, whether a local anesthetic will be used, and whether there is a risk of experiencing any pain after the procedure. According to Beauchamp (ibid.), knowing these basic facts and being able to form beliefs (or preferences) about them means that the patient's understanding is adequate.

Beauchamp's last condition – the absence of controlling influence – is rather straightforward. It demands that a patient should be free of controls exerted either by external sources or by internal states that rob her of the ability to direct her own actions (ibid., 69). Beauchamp (ibid., 70) considers several cases that border on controlling influences including coercion and manipulation. Coercion is defined as the use or threat of harm to enforce an action, while manipulation is defined as a non-persuasive means of altering a patient's opinion (either by withholding or misrepresenting information). To give an example of both: one can imagine a physician influencing a reluctant patient to undergo a diagnostic exam either by threatening to abandon her if she does not comply (coercion) or by misrepresenting the costs and pains often suffered by those who undergo this examination (manipulation). The absence of such influences is a necessary requirement for protecting a patient's autonomy.

The conditions are clear enough when they are considered separately. But a complication arises when we stop to consider how they may come together to determine autonomy. According to the concise theory, it is the extent to which these conditions are satisfied that determines whether a patient's actions are more or less autonomous. But this raises the obvious question: at what point do we say that the patient's actions are autonomous? When are we justified in defining any particular cut-off point? These are the questions I will now address.

1.2 Locating Cut-off Points in the Concise Theory of Autonomy

How should we understand Beauchamp's recommendation that there ought to be a cut-off point above which the patient's actions are considered autonomous, below which they are not? As described above, Beauchamp (ibid., 71) argues that the cut-off point should be determined by the context. But, on its own, this statement is unclear. There are at least two ways in which we may interpret Beauchamp's position here: either we understand cut-off points as absolutely defined according to specific conditions that patients might find themselves in, or we understand them as relatively defined according to each specific patient's perception of the particular situation in which she finds herself.

Under the first interpretation, the cut-off point is externally assigned and fixed for every possible context – regardless of the acting patient's concerns, her beliefs or preferences[2]. If a patient is undergoing a minor procedure – say, a root canal – then her decision can be considered autonomous only if she meets an externally assigned degree of autonomy. If a patient is undergoing a major procedure – say, an open-heart surgery – then her decision can be considered autonomous only if she meets a different (presumably higher) degree of autonomy. The central point of this interpretation is that the same cut-off point is applied to all patients as long as they are undergoing the same procedure.

But this might not be the most charitable reading of Beauchamp's position. This is for the simple reason that it implies that decision scenarios can be defined absolutely regardless of the patient's concerns and of the contingencies affecting her decisions. This is no minor issue. To maintain an absolute interpretation of cut-off points, we would have to accept either that the patients' concerns are negligible or that the absolute interpretation can encompass every patient's concerns in every possible scenario, and under every possible contingency. The first commitment flies in the face of autonomy since, by definition, it holds that the patients' concerns do not matter.

2 By 'externally assigned' I mean to say that the cut-off is defined not by those participating in the procedure, but by any other source - perhaps an arm-chair philosopher, who elaborates some criteria from which we derive the cut-off required.

The second commitment imposes a daunting epistemic requirement for us to define a patient's actions as autonomous or non-autonomous.

To see this, consider how we would establish an absolute cut-off point for root canals. The treatment may be considered a minor procedure by an adult. But if that same patient was younger, then the same procedure might be considered more significant. If a patient is suffering a serious illness, then a root canal treatment's imposition might seem negligible in comparison. If the patient starts to heal, then the root canal's imposition relatively grows in significance. Taking such examples at large scale, it would be difficult to define a cut-off point for every person, every procedure and every possible contingency. There might as well be an infinite number of relevant variables to consider.

A second, more charitable reading of Beauchamp's position would simply state that there is no absolute degree of autonomy that ought to be satisfied. Instead, locating cut-off points turns into a pragmatic exercise. It is a subjective judgement when a patient's actions are considered autonomous or non-autonomous, decided after taking into account our own aims, the patient's concerns and the contingencies affecting them[3]. Beauchamp (ibid., 71) himself alludes to a similar, pragmatic interpretation when he warns that a theory of autonomy may - in a given context – set too high or low a threshold to be workable. In the former case, we risk rendering "nonautonomous … [what] many individuals normally regard as autonomous", while in the latter case we risk rendering "many individuals who are normally regarded as non-autonomous [as] autonomous" (ibid.). One implication of this reading is that a patient's actions are only sufficiently autonomous according to the context in which they are carried out. A certain degree of autonomy might be sufficient in light of certain conditions, but insufficient in light of others. For example, an adult patient who decides to undergo a root canal treatment with x degree of autonomy might be considered sufficiently autonomous, while a minor who decides to undergo the same treatment with the same degree of autonomy might not be. In light of our institutions, the minor would require her legal guardian's consent. Sufficiency can therefore be interpreted as context-specific.

So far, I have reviewed Beauchamp's concise theory of autonomy, clarifying its conditions and its cut-offs. This theory develops an account of degrees of autonomy, which relies on the fulfilment of three conditions: (i) intentionality, (ii) adequate understanding, and (iii) the absence of controlling influences. Recognising that such an account is only workable once we decide when an action can aptly be labelled as autonomous or not, Beauchamp (ibid., 71) recommends that we establish cut-off points in light of our objectives and in light of the contingencies at hand. In the next subsection, I will show how informed consent is thought to protect autonomy.

1.3 How Informed Consent Protects Autonomy

Beauchamp (ibid., 57) tries to demonstrate that informed consent protects autonomy by showing that it ensures the three conditions laid out by the concise theory. He does this by defining informed consent as the autonomous authorisation of a procedure – meaning that, in healthcare, a patient gives informed consent if she authorises a medical intervention (i) intentionally, with (ii) adequate understanding and in (iii) absence of controlling influence. By defining informed consent in terms of autonomous action (authorisation), Beauchamp ensures that by satisfying the former's requirements, we simultaneously satisfy the latter's conditions.

3 Although such an interpretation might resemble the problematic case previously described – where one would have to define an absolute cut-off point for every case – it differs in that it allows us to simply drop certain contingencies from consideration in light of our aims and the patient's concerns. It is pragmatic in that we can define a patient's actions as autonomous or not in considering however many contingencies that we think are useful. It also does not commit us to any strong claim that there is a well-defined degree of autonomy that should be met by all patients. Hence, it is far more lenient than the absolute interpretation of cut-off points.

To see how this is done, let us borrow from a previous example. Suppose that we are worried about the possibility that a domineering physician might threaten to abandon a patient if she does not agree to undergo a diagnostic exam. Assuming that it is obtained without failure, the requirement of informed consent would protect the patient from such coercion by ensuring that she agrees to the examination only in the (iii) absence of controlling influences (ibid., 60). Similarly, suppose we are worried that the same, domineering physician might manipulate her patient by omitting information about the diagnostic exam. Once again, requiring informed consent can alleviate this worry because it demands that the patient agrees to this examination only if she has (ii) adequate understanding (ibid., 60).

Now we can see how Beauchamp's argument fits together – how he develops an account of autonomy as a matter of degrees and how he ensures that they protect autonomy. Having established Beauchamp's position, I now turn to argue against it.

2. Informed Consent Does Not Protect Autonomy

My argument takes three steps to make: first, I will show that for adequate understanding to be satisfied in a way that protects autonomy it will need to satisfy two requirements: (A) determines whether adequate understanding has been satisfied;(B) determines whether adequate understanding protects patients' capacity for autonomous action. Next, I argue that (A) can be met in ways that contradicts autonomy, while (B) cannot be said to have been met. This, I will argue, tells us that adequate understanding is not concerned with protecting autonomy. The third and final step of my argument is to show that the remaining two conditions are insufficient in protecting autonomy.

2.1 Two Additional Requirements for Adequate Understanding

Beauchamp's description of adequate understanding relies on lenient requirements. As mentioned, he argues that a patient satisfies this condition only if she has a basic understanding of "pertinent information" of the procedure to which she subjects herself and can formulate beliefs about them (Beauchamp 2010, 68). But this requirement leaves much to be desired. Which facts are most pertinent? How would one determine them? Since Beauchamp does not give any explicit answers to these questions, we are left to interpret them from the text.

Here we face the same interpretative issue that we faced during our discussion of cut-off points. One may interpret what is pertinent as absolute – externally assigned and fixed for every possible context, irrespective of the patient's identity. Alternatively, one may interpret pertinence as relative – pragmatically assigned according to the patient's identity and circumstance. For the very same reasons that has led us to reject the absolute interpretation of cut-off points, I will reject the absolute interpretation of pertinent information: it would impose the daunting task of defining these terms for every person, every procedure, and every possible contingency.

We are now left with a relativist interpretation of pertinent information. Like the case with cut-offs, the relativist stance is also a pragmatic one, deciding what is pertinent according to the physicians' goals, the patient's identity, and her beliefs and preferences. But notice that this interpretation raises a difficult problem: the information most pertinent to the patient may not be the information that the physician deems pertinent. This makes it possible for the physician's goals to conflict with the patients' beliefs and preferences.

If we prioritise the patients' interpretation of what is pertinent over the physicians', then we risk allowing for the patient to undergo an invasive procedure without knowing what it entails. To see this, consider again the

example of a patient undergoing a root canal treatment. Suppose that she does not care much about what the treatment actually entails nor about its side effects. Instead, this patient only cares about whether her dentist endorses this procedure and whether this procedure is affordable[4]. All other concerns are secondary and negligible.

The problem here is that neither concern tells the patient anything about the procedure itself or about its side-effects. Yet the patient can still satisfy the condition of adequate understanding since she understands the information she finds most pertinent: she is sure that the dentist recommends the procedure and that she can afford it. In this case, satisfying the condition of adequate understanding requires no actual knowledge of what a root canal treatment actually entails[5].

Of course, this is an intuitively undesirable conclusion. Presumably, an ideal definition of adequate understanding should not allow for such awkward results. We would want for there to be a set of non-arbitrary facts that the patient should know before she undergoes a medical procedure. Such facts should, for example, ensure that the patient has an idea of what a procedure entails, what side-effects she should expect, and whether there are any alternative ways of addressing her medical problem. Hence, for the condition of adequate understanding to be met, the patient would need to satisfy an additional requirement:

A. For adequate understanding to be achieved, the patient must know a set of non-arbitrary, material facts about the procedure.

But there is also a different requirement to be met. We would want to know if meeting the condition of adequate understanding necessarily protects patients' autonomy. Beauchamp (ibid., 60) himself hints at such a requirement when he argues that adequate understanding protects autonomy when it "help[s] patients … improve the quality of their decision making, which is a matter of fostering autonomous choice." Hence, our second condition:

B. For adequate understanding to enhance autonomy, it should be a fact that improving the patients' understanding protects her capacity for autonomous actions.

Here, I conclude the first step of my argument. I have established two additional requirements for determining whether (A) the condition of adequate understanding is met and (B) whether the condition succeeds in protecting autonomy. In the next section, I will move on to the second step of my argument to make the case that both requirements can be met in ways that contradict autonomy. I then proceed to the third step of my argument to demonstrate that the remaining conditions – intentionally and the absence of controlling influences – are insufficient in protecting autonomy.

2.2 Contradicting Autonomy with Adequate Understanding

Having established requirements (A) and (B), let us examine them in detail. For (A) to be realised, one must accept that we care more about what the patient ought to know than what the patient cares to know. This is implied by the fact that requirement (A) demands that patients must be made aware of certain information that we (or, perhaps the physicians) believe to be most pertinent, regardless of what the patient wants or cares to know.

4 One might of course argue that the patient wisely trusts the experts' opinion, but this does not change the fact that she might not know what a root canal treatment entails.

5 Though this might seem unrealistic, it is worth remembering that we are describing a hypothetical scenario that illuminates the strength and weakness of a particular account of informed consent. If there are such faults in simple cases like these, then we can imagine that similar faults could arise in situations that are more serious and complex.

This ultimately means that, for the physician to satisfy requirement (A) and meet the condition of adequate understanding, he may have to enforce information upon the patient that she does not wish or care to know.

Imagine again that a patient is deciding whether to undergo a root canal treatment. But in this case, imagine that she also has a crippling fear of pain and does not want to hear about the possibility of suffering an infection or an inflammation after the procedure. To satisfy requirement (A) of informed consent, the physician would have to inform the patient about the possible complications that might occur after the procedure has taken place. Otherwise, the patient would not know the whole set of material facts that requirement (A) has deemed necessary. In a case like this, requirement (A) obliges the dentist to contradict the patient's desires and inform her of the procedure's possibly painful side-effects. The dentist might have to infringe on the patients' autonomy by going against the patient's intention to not know certain facts that were nevertheless deemed pertinent. If instead we decide that this is an undesirable conclusion – that we should not abide by requirement (A) after all – then we would revert back to the original problem of arbitrary judgements: the patient would be allowed to be ignorant about the procedure to which she subjects herself.

What about requirement (B)? For the requirement to be realised, one would have to show that by improving a patient's understanding of a procedure we protect her capacity for autonomous action. But it is unclear whether informing the patient about pertinent facts does any such thing. What I want to do here is reject Beauchamp's (ibid., 6.0) answer that it necessarily does. Imagine, the same pain-fearing patient that is about to consent to a root canal treatment. Suppose that her dentist somehow determines that only 10% of people suffer mild pains as a result of minor complications after the procedure, whereas 1% suffer more serious pains as a result of major complications.

It is possible that by informing the patient of this, the dentist is actually hindering her capacity for autonomous action. In laboratory settings, it's been repeatedly shown that fearful individuals often overestimate the probabilities of harmful outcomes (for a review, see Weimer and Pauli 2016). In our case, it is possible that the patient vastly overestimates the probability of her experiencing serious pain and therefore refuses to undergo the procedure altogether. This would be especially problematic if she would have chosen otherwise had she an accurate estimate of the likelihood of a major complication occurring and of her suffering any serious pain (assuming there is such a thing as an 'accurate estimate'). It's a tricky matter, but we cannot exclude the possibility that the dentist might unintentionally drive the patient to act in a way that she would not want. In this case, the dentist may have imposed an external, controlling influence, thereby contradicting one of the conditions of concise autonomy[6]. We therefore cannot accept Beauchamp's claim that meeting adequate understanding necessarily protects the patient's capacity for autonomous action, at least not without further qualification[7].

What lessons can we draw from this discussion? From the first one, we learn that satisfying requirement (A) has less to do with protecting autonomy and more to do with the patient being informed about the procedure she considers. This means that our concern with ensuring the patient's understanding overrides our concern for the patient's capacity as an autonomous actor. Our conclusion here casts doubt over adequate understanding's status as a condition for autonomy.

6 Note, that this does not at all imply that a patient who overestimates harmful probabilities cannot ever act autonomously. All this means is that we cannot grant Beauchamp's claim that more information inevitably improves the patient's capacity for good and autonomous action. In other words: more information does not necessarily protect autonomy.

7 Pursuing this line of reasoning would lead us too far afield. For our purposes, it is sufficient to say that we cannot accept Beauchamp's claim about adequate understanding without further qualification.

This concludes the second step in my argument: to show that adequate understanding does not necessarily protect autonomy and can, instead, contradict it. Now, I move on to the third and final step of the argument: I show that the remaining conditions of intentionality and the absence of controlling influences are insufficient in protecting autonomy.

2.3. Why Informed Consent Does Not Protect Autonomy

Recall that informed consent is defined as an autonomous authorisation of a procedure. If the preceding argument is right, adequate understanding cannot be said to protect autonomy and so is not implied by the word 'autonomous' here. The only remaining conditions of autonomy are intentionality and the absence of controlling influences. I will now construct an example where informed consent – understood as intentional authorisation, absent of controlling influences – does not protect autonomy and yet is still desirably obtained. Imagine the following scenario:

> A physician administers for a recovering alcoholic a pain management program after she had undergone major surgery[8]. This pain management program includes a potentially addictive opioid medication. Suppose the patient is unaware that the medication may prove to be addictive or euphoric enough to tempt a relapse (since adequate understanding is not meant to protect autonomy, it needn't feature in our example). In fact, she has a provisional desire not to know of any negative side-effects that might deter her from taking the pain-relieving medication. She then takes the medication intentionally and in the absence of controlling influences. In a few weeks time, the patient relapses and once again submits to her addictive tendencies.

Let us take a closer look at this scenario. First, the recovering alcoholic – being sober – is fully capable of acting intentionally. At the time, she can decide whether she should accept the medication and can act on her decision according to a plan that she wills. By taking the medication, risking a relapse and finally relapsing, we can say that the patient's intentional actions today have stripped her of the capacity for intentional action tomorrow. Ensuring that she acts intentionally has, in this case, failed to protect the patient's autonomy.

What about the absence of controlling influences? One might be tempted to argue that the patient was an alcoholic and was therefore influenced by some psychological disposition that was beyond her control. But this would be wrong. In this scenario, we imagine that the patient is content in recovery and is in a perfect state to make her decision. And, in our example, the patient's desire not to know of any negative side-effects is only the result of her desperate desire to alleviate pain, not a sly, subconscious desire for a euphoric 'fix'.

One might argue that had the patient been adequately informed about the medication's addictive risks, then the patient's autonomy would have been protected. But this is not necessarily the case. First, it would contradict the patient's explicit desire not to know about any side-effects that might deter her from taking the medication and alleviating her pain. This, as we have established earlier, might constitute an infringement of the patient's autonomous intentions. Second, if we suppose that the patient is glad to know of the medication's addictive risks, then this still does not undermine the point that intentionality and an absence of controlling influences might not protect her autonomy.

8 To avoid confusion: a recovering alcoholic – as is commonly described – is one who has experienced what it is like to be addicted to alcohol, has suffered its detriments, and is now living soberly. The recovering alcoholic is not influenced by any substance. She merely knows that if she drinks again, she is almost guaranteed to succumb to her addictive tendencies.

The patient may decide that the risk is worthwhile: she intentionally and without controlling influences decides to take the potentially addictive medication. If she relapses, we would not be able to conclude that her autonomy was protected.

Now, if adequate understanding does not protect autonomy, and if the remaining conditions of intentionality and an absence of controlling influence are insufficient for the same purpose, then we are left with a puzzling result. Why would we still require informed consent in situations where Beauchamp's conditions fail to protect patients' autonomy? One possible answer is that informed consent is not about autonomy at all but about trust, dignity or mutual respect. This would fit cases where autonomy is protected and cases where it is not. Insofar as we are looking to justify the requirement of informed consent, we should look to justify it on grounds that are valid in a variety of cases – not only when it serves one particular purpose. Hence, I conclude that informed consent should not be justified on the basis that it protects autonomy.

Conclusion

I have argued against Beauchamp's claim that informed consent protects autonomy and should be justified on that basis. I began by considering Beauchamp's definition of autonomy, which depends on the conditions of intentionality, adequate understanding and the absence of controlling influence. My argument then proceeded in three steps: first, I showed that adequate understanding would need two additional requirements that determine (A) whether it is met and (B) whether it protects autonomy. Second, I argued that both requirements can be met in ways that contradict autonomy. In the third and final step of my argument, I argued that informed consent does not always protect autonomy if its remaining conditions only were intentionality and an absence of controlling influences. I conclude that the requirement of informed consent cannot be justified on grounds that it protects informed consent.

References:

1. Beauchamp, Tom L. 2010. "Autonomy and consent." The ethics of consent: Theory and practice. 55-78.
2. Beauchamp, Tom L., and James F. Childress. 2001. Principles of biomedical ethics. Oxford University Press.
3. El-Wakeel, H., Gordon J. Taylor, and J. J. T. Tate. 2006. "What do patients really want to know in an informed consent procedure? A questionnaire-based survey of patients in the Bath area, UK." Journal of medical ethics 32, no. 10 : 612-616.
4. Riordan, Fiona, Chrysanthi Papoutsi, Julie E. Reed, Cicely Marston, Derek Bell, and Azeem Majeed. 2015. "Patient and public attitudes towards informed consent models and levels of awareness of Electronic Health Records in the UK." International journal of medical informatics 84, no. 4: 237-247.
5. Singer, E. 1993. Informed consent and survey response: a summary of the empirical literature. Journal of Official Statistics, 9 (2): 361.
6. Wiemer, Julian, and Paul Pauli. 2016. "Fear-relevant illusory correlations in different fears and anxiety disorders: A review of the literature." Journal of anxiety disorders 42: 113-128.