Review article

The competence of adolescents to make autonomous and valid decisions on their own medical treatment

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Abstract

Aim: To provide an overview of current knowledge on the state of science related to the problem of competence of adolescent patients to make health care decisions. Furthermore, the paper aims to provide a contribution to the current debate on the topic of interest.

Method: A meta-review of scholarly knowledge on the topic of interest was conducted, combining literature from related fields in light of new research evidence. A broader reflection on the findings of the literature was provided, including the author’s opinion.

Results: A subset of adolescents have adequate maturity to give valid consent to their own treatment. Adolescents’ involvement in decision-making is important to them and promotes the therapeutic alliance. There is variance in adolescents’ decision-making competence. Their competence is determined by several factors related to adolescents themselves and their current context (and relationships), as well as other situational factors. Family, physicians and peers play an important role in adolescents’ decision-making competence. Asymmetry in development of various structures in adolescent’s brain is a key factor that makes adolescence a unique developmental period requiring a tailored response. Adolescents’ decision-making competence should be considered in each individual case. Their autonomy should be approached as relational autonomy.

Conclusion: Adolescents should be involved in treatment decisions to the extent possible. Therefore, apart from the individual assessment of adolescent’s decision-making competence, the establishment of a climate that enables adolescents to give valid consent to their own treatment is required. Moreover, adolescent patients should be activated and empowered to become fully engaged in the decision-making process. Training of physicians and development of strategies for achieving the desirable goals are necessary.

Keywords: Adolescents; decision-making process; decision-making involvement; competence / capacity; relational autonomy

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Introduction
The competence of adolescents to give an autonomous and legally valid consent to medical treatment is a hot ethical topic in medicine, which in recent decades has come under discussion in many countries. Various approaches have been put forward in different countries. As science advances, it is increasingly recognized that there is a subset of adolescents who have adequate maturity to give valid consent to treatment and adolescent’s involvement in decision-making is important. Adolescents should be involved in medical decisions in much greater extent than is usually recognized in clinical practice.

Adolescence is a culturally defined concept without clear-cut starting and ending points. (Hartley and Somerville, 2015). Adolescents is the final phase in the transition from being dependent child to autonomous adulthood. (Larcher, 2005). As adolescents claim their independence and control over their lives, making their own decisions is required. (Ruggeri, Gummerum and Hanoch, 2014). Studies have demonstrated that adolescents aged 14 and older have the capacity to consent to medical treatments in specific contexts. (Santelli, 2003). Furthermore, it is argued that the same holds for younger adolescents or even children (Cox, Brannigan, Harling and Townend, 2016). Legally-binding international texts such as the United Nations Convention on Rights of the Child (articles 12 and 13) and the Convention on Human Rights and Biomedicine (article 6) provide that the voices of children and adolescents should be heard and given due weight.

As science further progresses, we may need to reconsider our approach to adolescent decision-making (Arshagouni, 2006). Indeed, the rights of adolescents to be involved in treatment decisions have been expanded in recent years (Roberson and Kjervik, 2012). Adolescents have traditionally been given little voice in their health care treatment. However, over the last decades attitudes have begun to shift. Already many years ago, adolescents were considered able to engage in their own medical decisions. Medical professionals as well as parents have started to believe that a subset of adolescents are mature and ‘ought to have the opportunity to participate in even the toughest of health treatment decisions’ (Weir and Peters, 1997).

Beidler and Dickey (2001) state: The growing interest in children's involvement in their own healthcare decisions…’ Kuther and Posada (2004) state that ‘…the literature in developmental psychology has shown that adolescents are able to make meaningful decisions…’. However, obtaining adolescent’s valid consent is a complex and multifactorial process. While it may be unclear (or fairly unclear) when an adult patient has given consent in light of modern decision-making science, the situation can be a lot more unclear, and more complex, when a minor patient is involved.

There is no universal agreement on adolescents’ decision-making competence (DMC). There is no chronological age of consent for medical treatment (Dickens and Cock, 2005; Schwartz et al., 2015; Hein, 2015).
The existing consent frameworks do not specify a minimum age for which an adolescent might be considered competent to consent to medical treatment (Parekh, 2006; Schwartz et al., 2018). Importantly, it seems impossible to define a cut-off point of consent for medical treatment based on neuroscience (Grootens-Wiegers et al., 2017). This is reasonable because adolescent’s DMC is determined by a variety of factors that interact with each other and hence it is context-dependent and changes over time. (Larcher, 2005; Grootens-Wiegers et al., 2017). DMC may be substantially different from individual to individual. Adolescents DMC can be placed on a continuum that ranges from being completely incompetent to being fully competent (Batten, 1996). Not all the adolescents ‘proceed to maturation along the same timeline’ (Katz et al., 2016). Adolescents’ DMC is a condition determined by a bunch of abilities needed to achieve certain goals (i.e. understanding the recommended medical treatment and its consequences, after having balanced benefits and burdens-risks). The following cognitive aspects of decision-making have been cited as indicators of competence: choice; comprehension; creativity; consequentiality; correctness; credibility; consistency; and commitment (Mann, Harmoni and Power, 1989). Interestingly, Kambam and Thompson (2009) distinguish cognition versus judgment in decision-making. Notwithstanding, it is important to bear in mind that perfect cognitive functions are not necessarily requirements for decision-making capacity. (Friedman 2003, p. 8). And in fact, perfect cognitive functions may not always be sufficient for having full DMC. Modern theory places emphasis on values and emotions rather than on cognitive functions when considering one’s DMC. Values, preferences and emotions play an important role in decision-making process. (Hermann et al., 2016).

While adults’ DMC is taken for granted, adolescents’ DMC should be considered in each individual case. More precisely, little is known about the capacity of adolescents with psychiatric mental disorders to consent to treatment (Roberson and Kjervik, 2012). Interestingly, mentally ill persons do no way lack decision-making competence for the only reason they are mentally disordered (Jeste, Depp and Palmer, 2006; Radoilska, 2012; Widdershoven et al., 2017; Mandarelli et al., 2017). Mental disorder does not necessarily involve a loss of personal autonomy. At any rate, it is crucial to bear in mind that the politics which have been designed for what is called ‘good medical practice’ might not fit well with mental healthcare context. (Tan, Passerini, Stewart, 2007).

Methods
Design
A search according to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines was carried out attempting to assess comprehensive knowledge in the field in a systematic
manner and assure a replicable search strategy. As research question was far-reaching, I considered a comprehensive meta-review of systematic reviews and reviews the most appropriate review to locate a wide range of literature relevant to the aims of the study.

**Information sources**
Relevant articles were retrieved through a systematic searching in electronic databases to identify peer reviewed articles. The process involved searching in the electronic databases MEDLINE (1973 to October 2020), SCOPUS (1960 to October 2020) and PsycINFO (1947 to October 2020). Search terms included: 1) Adolescent(s), 2) Pediatrics, 3) Minor(s), 4) Child/Children, 5) Decision-making/Decision making, 6) Consent, 7) Competence, 8) Capacity. These search terms were combined in keyword searches in all three databases. Additional articles were identified through other sources.

**Eligibility criteria**
Papers were included if they were: 1) Published in peer reviewed journals; 2) Written in the English language; 3) Systematic review or review. Furthermore, papers were included if they 4) Contained significant data relevant to the aims of the study; 5) Focused on data relating to or situated on the edge or periphery of the topic of interest (i.e. information provided, parental attitudes and roles, health professionals’ attitudes and roles, adolescents’ consent to procedures regarding not their treatment but other medical areas such as organ donation and transplantation or medical research).
Papers were excluded if data were published in a way that data relevant to the aims of the study could not be deciphered from overall reported data. Papers were excluded if they reported data on the topic of interest which, however, do not make substantial contribution to the review. Non-data papers were only included if they involved essential or important knowledge relevant to the aims of the study. The documents that only provided data regarding adolescents’ decision making competence / capacity exclusively related to a particular disease or a particular culture were excluded.

**Study selection and data extraction**
The documents identified through database searching were screened to identify relevant studies that might merit inclusion. The relevant studies were read through carefully to find out if were eligible for analysis. Titles, abstracts and full texts of the records were screened by the reviewer who selected those assessed as eligible according to the inclusion criteria. Titles, abstracts and full texts that assessed as ineligible for further analysis according to the inclusion / exclusion criteria or inappropriate for full-text analysis were discarded. Reference lists and citations of eligible articles were also screened and reviewed for additional papers.
The literature database searching resulted in a total of 7504 documents (MEDLINE=3416, SCOPUS=2576, PsychINFO=1512). By searching multiple databases for a wide-ranging
topic (as is the topic of interest), inevitably, a lot of overlapping content (duplicate documents) were retrieved. After removal of duplicates and initial screening of titles, 687 title, abstract and full-text records were identified for screening (title and detailed abstract analysis).

At the end 56 articles that assessed as eligible for review according to the inclusion / exclusion criteria were retained for further analysis (see flow chart over systematic review process, Fig. 1).

Results
Uniqueness and diversity of adolescence

Adolescence is a unique developmental period requiring a tailored response. Risky behavior, short-term reward-seeking and sensation-seeking, as well as peer influence are main characteristics of adolescence, especially in the early stages (Grootens-Wiegers et al., 2017; Ciranka and Bos, 2019). Adolescents ‘promote the illusion of being special and invulnerable to the consequences of dangerous or risky behavior’. This is the ‘illusion of invincibility’ (Ruggeri, Gummerum and Hanoch, 2014). These uniquenesses of adolescence are mainly due to developmental asymmetries in the central nervous system that affect negatively the cross-talk between different structures of the brain (i.e. between the prefrontal cortex and striatal regions) (Grootens-Wiegers et al., 2017). The structures that determine the control (cortical system) are developing later than the structures that serve the impulse and the imminent reward (Grootens-Wiegers et al., 2017). For these reasons adolescent’s DMC may be compromised in specific contexts.

Adolescents focus on short-term reward rather than long-term reward. They over-estimate their risk of dying young. Furthermore, adolescents focus on issues related to school and are prone towards decreasing sadness (Grootens-Wiegers et al., 2017). Increased risk-taking or propensity towards short-term reward may lead to a false decision even though afterwards they may reasonably assess their leap in judgment.

Factors affecting the DMC of adolescents

The developmental stage of an adolescent and the maturity of their cognitive functions are main factors affecting their DMC. In addition, various environmental factors may profoundly affect their DMC, such as: their family (especially parents), other relationships (especially peers), healthcare providers (especially physicians), the quality of the information provided (as well as the adaptation of that information to the developmental stage, the literacy and the culture of the adolescent), their understanding of that information, their mental health state at the particular time of deciding, previous experiences, especially those of serious chronic illness. That experience of illness may enable adolescents to better understand the information provided (Larcher, 2005). However, the experience of illness may also hinder their self-determination due to the fact that the family may respond to a suffering child with overprotection. (Fost and Kessel, 2001). Furthermore, other authors highlight the role of factors such as the development of skills and mature critical thinking, as well as the development of values, emotions and moral authority, their literacy, their culture, the involvement of the family and the family relationships, (Campbell, 2006; Didcock 2007; Alderson, 2007; Larcher and Hutchinston, 2009; Katz et al., 2016). It is argued that children who are raised in a warm and trusting environment without attachment difficulties or difficulties within the home are more likely to be able to make autonomous
decisions from an early age (Tan and Fegert, 2004; Tan et al., 2007).
The adolescent’s decision-making process is a complex and multifactorial process. For instance, it is arguably stated that in naturalistic choice contexts ‘the myriad factors that influence risky and impulsive-choice behaviour interact’ (Rosenbaum and Hartley, 2019).

Adolescents should be involved as much as possible in treatment decision-making
Adolescents should be involved as much as possible in treatment decision-making, irrespective of their DMC (including adolescents with mental disorders). In clinical practice, adolescents should be treated as competent adults and physicians should make every effort for doing it (Larcher, 2005). Decision making involvement (DMI) can be thought of as playing a pedagogic role. DMI helps him or her become a better decision-maker in the future, as it is ‘associated with favorable views of the decision-making process, self-efficacy, and adherence’ (Miller, 2018). DMI represents respect for the right of adolescents to self-determination (Larcher, 2005). Indeed, DMI shows respect for adolescents as developing persons in line with the principles of patient-oriented medicine. Moreover, ‘by involving the child in the decision-making process, he is being treated as having moral worth and therefore learns that he is a being of moral worth’ (Sibley et al., 2016). In short, optimal levels of involvement of adolescents in decisions about their care shows respect for their integrity and develop them into potential competent decision makers. Furthermore, by involving adolescents in the treatment decision-making process means helping them to understand their illness and take responsibility for it so that they can better understand daily dilemmas related to their treatment, thus facilitating therapeutic compliance. (Anderson, Sutcliffe, Curtis, 2006). However, ‘despite recognition by the medical profession that children’s involvement in decision-making is important, the extent to which children are involved in practice appears to be low’ (Miller, 2018). It is not surprising that ‘in providing confidential care a balance should be considered between the needs of the adolescent patient, parents, and provider’ (Hardoff, 2012). However, adolescents often have little voice in medical decision-making and ‘are granted limited access to confidential medical care’ (Kuther, 2003).
In that regard, it should be noted that the approach to adolescent consent across disciplines is not coherent. In the USA, while ‘explicit federal guidelines and laws exist for the inclusion of minors in research’, ‘minors are often left out of participating in the health care decisions that may affect them for a lifetime in illness and wellness preservation’ (Dickey, Kiefner, and Beidler, 2002). Furthermore, ‘in many countries, a young person who seeks medical care is not authorised to consent to their own assessment and treatment, yet the same child can be tried for a criminal offence’ (Noroozi, Singh and Fazel, 2018). Moreover, although the legal framework in many countries permits young people to consent for vaccinations if competent, lack of
written parental consent can still prevent uptake (Fisher et al., 2018). Not surprisingly, Gondek et al. (2017) state: ‘As research shows, children and young people are rarely actively involved in their treatment within mental health services. This is despite a strong recent emphasis on providing care within child and young people mental health services according to person-centred principles.’

Since there is ethical and legal uncertainty over adolescents making treatment decisions (framework and guidance are absent), physicians default to parental consent (Alderson, 2007; Bowers and Dubicka, 2009). Tan et al. (2007) state that the emphasis on adolescents’ autonomy may cause anxiety amongst physicians. Physicians are led to ‘refuse to see adolescents aged under 16 years on their own for fear of incurring parental wrath or even legal action’ (Lercher BMJ, 2005). This, however, serves the purpose of protecting physicians themselves from legal liability rather than serving the purpose of good medical practice and therapeutic alliance. Therefore, in the USA courts developed the (long-recognized) mature minor doctrine (rule) that recognizes that a subset of adolescents are adequately “mature” to meet the decision-making criteria for making valid and autonomous treatment decisions when the treatment is not of a serious nature and is undertaken for the benefit of the adolescent (Coleman and Rosoff, 2013; Katz et al., 2016). Note however, that the American courts provide a wide-ranging definition of maturity. This definition does not facilitate the practice of adolescent’s DMC assessment. Weithorn (2020) arguably states that ‘it is unclear how an evaluator, whether a health care professional or a judge, should assess maturity when it is defined by such an extraordinarily broad and open-ended list of factors.’ Adolescents should be involved in treatment decision process to the extent possible, assessing their DMC on an individual case basis and recognizing that the elements of adolescent’s DMC are evolving (Santelli et al., 2003; Schachter, Kleinman and Harvey, 2005; Katz et al., 2016). In that regard, it has been argued that in assessing adolescents’ DMC should be involved a wide range of professionals (Parekh, 2006). However, this might delay the decision-making process due to the fact that the adolescent might feel intimidated by so many assessments. At any rate, ‘potential assessors should have the necessary practical skills and an understanding of the child in their social and medical context….The involvement of a psychologist or other independent third party should be considered in cases that raise serious concerns’ (Larcher and Hutchinson, 2009).

Lastly, it is of great importance that , “…there are good reasons to tell the truth to children, which are independent of any question of the child's capacity to be involved in decision-making‘ (Hudson, Spriggs and Gillam, 2018). And in fact, lack of competence does not exclude minors from the human right to have a say (Mårtenson and Fägerskiöld, 2008). However, it is of paramount importance that he communication with adolescents about the diagnosis of their own life-threatening condition may have effect
on adolescent’s ‘emotional, behavioural, and social functioning, as well as treatment adherence, disease progression, and wider family relationships’ (Stein et al., 2019). Note, however, that the situation in adolescent medicine is less straightforward than the situation in adult medicine, especially when it comes to decisions about whether to withhold life-sustaining treatment or not (Lantos and Miles, 1989).

Concerns about the involvement of adolescents in treatment decision-making process

The lack of previous experiences, the lack of critical thinking skills as well as the fact that adolescents place much greater weight on immediate rather than long-term consequences, are among the arguments drawn against the involvement of adolescents in medical decisions without their parents (Hein, 2015a). Indeed, adolescents are less able than adults to assimilate and integrate, to analyze, synthesize and evaluate the information provided, even though they may completely recognize the (short-term but not the long-term) benefits of the recommended treatment (Lewis, 1981; Urberg and Rosen, 1987; Roberson and Kjervik, 2012). It is noteworthy that during adolescence processes like learning from direct experience and tolerance of ambiguity are amplified (Hartley and Somerville). Botti, Orfali and Iyengar (2009) state that ‘being responsible of a decision intensifies negative emotions associated with a difficult choice’, especially when it comes to what the authors call ‘tragic’ medical choices.

Interestingly, it has been argued that adolescents may have less decision-making competence than adults in certain areas but may have similar levels of competence in other areas (Byrnes, 2002). A minor's capacity to consent to general health care does not always mean their ability to engage in any other complex and multifactorial process of obtaining consent to a specific health-related procedure (i.e. HIV testing and treatment) (Ho et al., 2005). At any rate, we should bear in mind that ‘the current state of knowledge does allow for reflection on the development and maturation of adolescents and the implications for considering them criminally responsible’ (Mercurio et al., 2020).

It is suggested the so-called ‘dual consent’ procedure, where both parents and adolescents from the age of 12 years give their consent. (Hein, 2015b). Furthermore, it has been suggested that a surrogate decision maker for an adolescent (i.e. a parent or a physician) should make a decision (and then give the so-called ‘future-oriented consent’) considering the future adult that the adolescent will become, namely, considering the presumed decision that in all likelihood this future adult would make (Sibley et al., 2016).

As to adolescents with psychiatric disorders Schachter, Kleinman and Harvey (2005) state that ‘it is unclear how well adolescents with psychiatric problems appreciate their disorder and treatment recommendations and whether this situation is unique to adolescents or applies to adults as well.’
Peer influence
Exposing adolescents to distinctly emotionally and socially loaded contexts (hot situations) increases the propensity towards risk-taking behavior, short-term reward (reward reactivity) and impulse driving decisions. That is to say that exposing adolescents to hot contexts heightens their susceptibility to poor decision making (Grootens-Wiegens et al., 2017; Schwartz et al., 2018). Peers-mediated contexts, namely when adolescents (especially early adolescents, aged 10-14 years) are together with peers (especially with risk-accepting peers) are hot contexts and increase the adolescents’ risk-driving (Shephard et al., 2011; Grootens-Wiegens et al., 2017; Schwartz et al., 2018). Conversely, exposing adolescents to risk-averse peers does not increased their risky driving (Shephard et al., 2011). However, deciding upon treatment in healthcare settings is often deciding in cold / neutral contexts or moderately hot contexts (i.e. only minimally emotionally loaded contexts) where often peers are not part of medical conversation and therefore adolescents are able for good decision making and show minimal impulsivity (Schwartz et al., 2018). However, peers actually may motivate an ill adolescent to be more socially active, thus improving his or her DMC (Schwartz et al., 2018). In that regard, it is important that Roberson and Kjervik (2012) state that peers are less influential when the adolescent is deciding on life-threatening issues. Observing the others’ behavior can help adolescents make decisions: i.e. when uncertain of what to do or adopting the others’ risky behavior. Furthermore, adolescents’ decision may be influenced when being observed. In a peer context an observed adolescent may want to send a social signal to his or her peers (Ciranka and Bos, 2019). The developmental processes that underlie the sensitivity of adolescents to peer influence remain poorly understood. The social motivation model has been used to provide some further explanation of the issue (Ciranka and Bos, 2019). Finally, it should be highlighted that the influences peers on outcomes in psychiatric mental health contexts are poorly understood (Roberson and Kjervik, 2012).

The role of parents
Parents (and physicians) can (and should) create the context for adolescents’ competent decision making. Parents can be a barrier or facilitator. They may be supportive or not of an adolescent’s treatment decision. (Hayes et al., 2019). It should be highlighted that the influences of parents and family on outcomes in psychiatric mental health contexts are poorly understood (Roberson and Kjervik, 2012).

Shere and Reppucci (1988) argue that the gravity of a medical dilemma and the degree of parental influence may compromise the adolescent’s DM. According to the authors the more coercive the parental influence, the more the likelihood that the adolescent will resile from his or her original (non-influenced) treatment decision. However, adolescents are more likely to resist parental influence when the decision has serious implications for the
adolescent’s health (Shere and Reppucci, 1988). At any rate, parenting styles may have an adverse impact on the development of mature decision-making capacities in adolescents (Partridge, 2010).

As parents shape the family environment and are better situated to understand the needs of their children, not only are they recognized as the appropriate ethical and legal surrogate medical decision-makers for their children, but also may facilitate adolescent’s DMC more than physicians do (Hayes et al., 2019). However, American Academy of Pediatrics (2016) arguably state that there is not an absolute legal right of parents to make their own autonomous treatment decisions regarding their children (Katz et al., 2016). There is parents’ responsibility to preserve family relationships and support the best interest of their children. According to the model of constrained parental autonomy parents can ‘balance the “best interest” of the minor patient with his or her understanding of the family’s best interests as long as the child’s basic needs, medical and otherwise, are met’ (Katz et al., 2016).

Parental responsibility is a concept introduced by the Children Act 1989 which in Section 3(1) defines parental responsibility as ‘all the rights, duties, powers, responsibilities and authority which by law a parent of a child has in relation to the child’ (Woolley, 2011). Note however, that Weithorn (2020) recently states that in the USA ‘the doctrine of parental consent remains the default legal and bioethical framework for health care decisions on behalf of children, complemented by a complex array of exceptions.’

Importantly, parents (and physicians) do not always understand adolescent’s best interest (Dreger, 2004; Alderson, Sutcliffe and Curtis, 2006). It is arguably stated that the parents’ right to decide on behalf of adolescents ‘can best be justified in terms of the importance of preserving intimate family relationships, rather than in terms of the child's best interests…’ (Downie and Randall, 1997). As best interest is an ‘an amalgamation of views’ and ‘open to subjective interpretation’ because there are different accounts of well-being placing emphasis on different values, defining best interest and beneficence is extremely difficult (Birchley, 2010; Bester, 2019). Best interest has been considered maximizing benefits and minimizing harms (Kopelman, 1997). Obviously, this is not a satisfactory definition. Bester (2019) writes that a physician has to weigh two criteria to establish the beneficence in each particular case: The one is related to preserving or promoting ‘a level of objective functioning that… anyone needs to pursue the good irrespective of the individual view of the patient’s good. The other is related to the subjective views of the patient’s own good’ (Crisp, 2017; Bester, 2019).

An adolescent’s best interests changes over time depending on the child’s age. Developmental stage, environment and culture are among the factors currently affecting the adolescent’s best interest (Sibley et al, 2016).
The role of physicians
Physicians should involve adolescents in treatment decision to the extent possible. They play a vital role in engaging adolescents in a empathic and trusting physician–patient relationship. (Kang and Kim, 2019). Physicians should engage adolescents in their own medical decisions to the extent possible. Therefore, physicians not only have to assess their DMC on an individual case basis, but also to empower and activate the minor patients. More specifically, a physician should go beyond the provision of adequate, clear, concise and unbiased information (Ubel et al., 2017). The presented information should be adapted and tailored to the developmental stage of the adolescent as well as his or her literacy and culture. In addition to the provision of information a physician should provide some insight into the inner world of the patient, thus empowering the patient to make use of his or her introspective attention and explore him or herself in order to become aware of the set of his or her own core values (strictly and stably allied to his or her narrative identity) and then to connect these values with the information provided. A patient may fit her decision into that set of values, intelligible from his or her own viewpoint, namely, his or her own concept of the human good (Hermann et al., 2016; Ubel et al., 2017). Hence, irrational decisions may be regarded as internally reasonable decisions, as long as these decisions are coherent with the ‘internal rationality’ of the decision-maker (Charland, 2001). Patients should be fully engaged in the process of (shared) making decisions on their own medical treatment, with their own values, preferences and emotions (Ubel et al., 2017). Modern theory shifts the focus from the provision of as much information as possible towards achieving better communication between physician and patient as much as possible (Milligan and Jones, 2017). Therefore, a physician should use narration to obtain sharing and transferring of insights between him or her and patient (Milligan and Jones, 2017).

Shared decision-making (SDM) is a part of good medical practice. In the context of SDM physicians should balance the complexities of patient’s autonomy (especially the values, preferences and emotions of the patient) with the benefits and risks of the recommended treatment. Physicians should establish a climate that enables a thorough exchange with adolescents and their families, which allows for a shared decision-making process. This is a process that is flexible and respectful, though time-consuming, which must be adapted to the developmental stage and social context of the adolescent (Michaud P-A, 2017). ‘The consent process can nurture and enlarge children’s understanding, trust and confidence, through the sharing and transferring of insights and responsibilities between adults and children’ (Alderson, Sutcliffe and Curtis, 2006). Furthermore, physicians have to balance the potential competing interests of all the various stakeholders involved in decision making ‘while complying with professional standards, the law, and their own ethical and moral convictions’ (Beh and Pietsch, 2004). Provided that parents have only responsibilities (not legal rights to make
their own autonomous decisions for the healthcare of their children, physicians should balance the views of parents and children (Cox et al., 2016). Physicians have to balance parental and minor autonomy. It is noteworthy in this regard that research findings have indicated that there are differences in adolescent and parent understanding and appreciation of research risks and procedures (Scherer, Annett and Brody, 2007). When the child and parents disagree regarding medical decisions the physicians have an important role. They have the challenging task of guiding the family to a final decision. Sisk et al. (2017) outline 3 models for the pediatrician’s role in such cases: deference (parental decision-making authority is prioritized), advocative (mature adolescent’s preference is prioritized), and arbitrative (working to resolve the conflict in a balanced fashion). The authors suggest that the arbitrative model ‘should serve as the initial model in nearly all settings.’ However, they argue that the physician has to ‘develop the wisdom to deploy the right model for each particular clinical situation.’

The parties have to ‘take the time to understand each other’s perspective as comprehensively as possible’. (Turkoski, 2005). Moreover, they should help families minimize conflicts between the members of family encountered in the processes of making difficult medical decisions as well as the negative emotional impact these decisions have on the family members (Ruggeri, Gummerum and Hanoch, 2014). Physicians who are not adequately trained should be given the possibility to ask for help from other health professionals. Already in 1996 McCabe wrote that ‘pediatric psychologists have to appreciate the ethical and clinical issues in medical decision making for families.’ Physicians have to protect adolescents from ‘serious and imminent harm’ while working collaboratively with all parents/families, respecting their cultures, religions, and the importance of the families’ autonomy and intimacy (Katz et al., 2016). Therefore, negotiation and containment skills needed for SDM with adolescents’ family members (Hayes et al., 2019; Ruggeri, Gummerum and Hanoch, 2014). Physicians should make every effort to involve the adolescent’s family in the decision-making process (Larcher, 2005). Besides, physicians should support dynamic decision making in family to manage serious chronic illnesses (Miller, 2018).

SDM ‘is increasingly being suggested as an integral part of mental health provision’ (Hayes et al., 2019). The same holds for the context of children and adolescents psychiatry (Hayes, Fleming, and Wolpert, 2015). There is physicians’ uncertainty over the term SDM and they (even if have studied in top universities) have inadequate training and experience of SDM in theory and (especially) in the real world (Ubel et al., 2017). There is limited research into what physicians believe the barriers and facilitators to engage in SDM with young people with mental health disorders (Hayes et al., 2019). Skills such as listening, openness and transparency, empathy and honesty are required (Hayes et al., 2019). Hayes et al. (2019) found that many physicians are feeling stressed and overwhelmed.
with their job demands, whereas other physicians feel less confident in engaging in SDM due to a lack of knowledge about the issue. ‘Lack of information, finite resources, lack of time, the confines of service regulations, disagreement between staff over courses of treatment’ are mentioned as barriers to engage in SDM (Hayes et al., 2019). Boland et al. (2019) found that ‘the most frequent barriers were features of the options (decision), poor quality information (innovation), parent/child emotional state (adopter), power relations (relational), and insufficient time (environment). The most frequent facilitators were low stake decisions (decision), good quality information (innovation), agreement with SDM (adopter), trust and respect (relational), and SDM tools/resources (environment).’ Furthermore, other physicians or other health professions may facilitate the physician of an adolescent to engage in SDM with the minor patient in case that the physician ‘feel uncomfortable discussing topics such as sexual side effects of medication’ (Simmons, Hetrick and Jorm, 2013; Hayes et al., 2019).

Lastly, physicians should bear in mind that the denial or withdrawal of an adolescent’s consent may practically have significant negative impact on providing care in an ethical and responsible manner. Traugott and Alpers (1997) detail three cases of adolescents who refused life-prolonging treatment and took drastic steps to avoid it. The inconvenience caused by this situation may lead to conflict between physicians and families and hence, may destroy the physician-patient relationship (Traugott and Alpers, 1997). Morgan (2018) discusses the case of an adolescent who withdrew her consent to surgery whilst in the anaesthetic room. This raises questions about whether the use of restraint is justified.

**Adolescent patients’ autonomy is relational autonomy**

The moral imperative for informed consent in medical ethics are founded in the ethical principle of respect for the fundamental principle of patient autonomy. Respect for autonomy involves the obligation to respect autonomous patient choices. Autonomy is a key principle that is usually weighted over the other three bioethical principles (beneficence, nonmaleficence and justice). Autonomy is a multidimensional philosophical notion that is variously conceived. There have been suggested many and overlapping accounts of autonomy. At any rate, we do not make our choices in a vacuum while having infinite options. The rule ‘all-or-nothing’ cannot be applied to autonomy. Genuine autonomy is an illusion. Completely voluntary choice in medical treatment is illusory. It is particularly so in pediatric care (Katz et al., 2016). Gomez-Virseda et al. (2020) recently argued for relational autonomy in the context of end-of-life care.

The relational account of autonomy appears to be justified. Autonomy does not make sense in vacuum. Furthermore, it is arguably suggested that person can only be conceptualized as being embedded in a network of relationships, dependences, interactions
and care. (Dove et al., 2017). In a framework like this a person cannot be completely independent and authentic. More particularly, Gomez-Virseda et al. (2020) share the perception that autonomy is conceived as lived (relational) experience that involves both independence from others and dependence on others (Bergum, Dossetor, 2005). Gomez-Virseda et al. (2020) state that their ‘relational account of autonomy is based on a dialogue between lived reality and conceptual thinking.’ The authors have regarded the decision-maker as a not fully competent person and in this perspective they ‘have thought about autonomy inductively, starting from a consideration of real-world lived experiences…from practice to theory, from lived reality to interpretations of right and wrong.’ Gomez-Virseda et al. (2020) recently argued for relational autonomy in the context of end-of-life care for the following reasons: a) There is variance in adolescents’ competence to consent. Minor patients’ DMC fluctuates. b) Patients receive many influences from their environment, and c) These influences determine and change the patients’ DMC.

Much of the same holds for adolescent patients. As presented above, adolescent’s DMC changes depending on factors such as developmental stage, social / cultural context, as well as other circumstances. Importantly, minor patients are to a greater extent than adults dependent on other people, especially their parents and physicians to whom they are obedient because of their need for approval (Hein et al., 2015a). Children’s decision-making competence is dependent not only on their own capacity but also on others, such as parents’ and healthcare professionals’ attitudes (Mårtenson and Fagerskiöld, 2008). It is argued that the quality of relationship between an adolescent and his or her parents / physicians is highly influential on his or her DMC (Hein et al., 2015a).

Family (especially parents), personal relationships (especially peers), health professionals (especially physicians) and cultural/social environment have a profound influence on an adolescent patient, are affected by the patient, as well as they influence each other. The adolescent patient is placed in the center (Gomez-Virseda et al., 2020). Martakis, Brand and Schröder-Bäck (2018) developed a conceptual model describing autonomy in child healthcare that includes the child, the pediatrician and the parents.

Conclusions
Adolescents should be involved in treatment decisions to the extent possible. Therefore, apart from the assessment of adolescent’s decision-making competence, the establishment of a climate that enables adolescents to give valid consent to their own treatment is required. Moreover, adolescent patients should be activated and empowered to become fully engaged in the decision-making process. Adolescents’ autonomy is relational autonomy. Training of physicians and development of strategies for achieving the desirable goals are necessary.
References


Kuther, T.L. and Posada, M. (2004). Children and adolescents' capacity to provide informed consent for


