|  |  |  |
| --- | --- | --- |
| **Applying patient related factors and perspectives** | | |
| **Subtheme** | **Sub-subtheme** | **Codes** |
| Patient’s characteristics | Patient’s characteristics | More-often initiation and prolonged resuscitation in younger patients (8) |
| Patients’ age (5, 22, 26, 28, 30, 31, 33, 34, 35, 40, 41, 42) |
|  |  |
| Social status | Being aware of social status, but not letting it affect decision-making (28) |
| Social value (30) |
|  | | |
| Ethical aspects concerning the patient | Perceived prognosis | Patient’s QoL (26, 29, 40, 43) |
| Perceived prognosis (5, 29) |
| Subjective assessment determined by patient assessment and scene clues (21) |
| Patient’s appearance (33) |
|  |  |
| Dignity | Upholding the patient’s dignity (24) |
| To die with dignity (28, 43) |
| Patient’s dignity (28) |
| Life is sacred (28) |
| To die without interference (28) |
|  |  |
| Patient’s wishes | Respecting patient wishes (22) |
| Patient’s wishes expressed by a proxy (41) |
| Advance directives (21, 27, 32, 34, 35, 38, 40, 41, 42, 44) |
|  |  |
| Patient’s best interest | Trying to evaluate the patients’ best interests (21) |
| Giving the patient the benefit of the doubt (22) |
| Patient’s best interests (29) |

**Supplementary File 4:** Synthesis process of included studies into themes and subthemes (references: qualitative, quantitative, mixed-method)

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| --- | --- | --- | --- | --- | --- | --- |
| **Involving and involvement of bystanders and family members** | | | | | | |
| **Subtheme** | | | **Sub-subtheme** | | **Codes** | |
| Family wishes and emotions | | | Family wishes | | Family wishes and expectations (21, 23, 28, 32, 36, 41, 44) | |
| Involving relatives in decision-making (28, 40) | |
| Pressure from relatives (29, 31, 45) | |
| Patient’s and family’s religion (31) | |
|  | |  | |
| Buying time for the family | | Continuing CPR for the family members (23) | |
| Giving family members time to realize the patient’s death (23) | |
| Allowing family to say goodbye (5) | |
| Family members acceptance of death (28) | |
| Continuation of CPR creates hope (23, 32) | |
| Unnecessary emotional trauma (44) | |
|  | |  | |
| Coping with the family’s emotions | | Support for the relatives (31) | |
| Feeling inadequate in meeting family needs (23) | |
| Transport to avoid facing relatives (28) | |
| Being uncomfortable with family reactions (45) | |
| Reactions from family members created uncertainty (23) | |
| Dealing with family’s emotional response (32) | |
| Cultural barriers (36) | |
|  | |  | |
| Identifying with the family | | Identifying with the family (23) | |
|  | | | | | | |
| The presence of bystanders | | | Meeting expectations | | CPR for “show” (23, 26, 35) | |
| Expectations and perceptions of bystanders (8, 28, 31) | |
|  | |
| Respecting bystander efforts | | Respecting bystanders’ resuscitation attempt (5, 41) | |
| Acknowledging bystander CPR (28) | |
| **The personal conditions of providers** | | | | | | |
| **Subtheme** | | **Sub-subtheme** | | | | **Codes** |
| Characteristics and experience | | Characteristics | | | | Type of daily work (22, 39) |
| Level of education (22, 33, 37, 41) |
| HCPs gender (30, 33, 35, 41) |
| HCPs age (33, 41, 44) |
| Specific training (33, 38) |
|  | | | |  |
| Experience | | | | Decision-making differences in experiences vs. novice HCP (8) |
| Experience and confidence (21, 22) |
| Inexperienced HCP commence or continue resuscitation more often (21) |
| Experience (22, 23, 31, 37, 38, 40, 41, 42, 43, 44) |
| Previous experiences with successful resuscitation (28) |
| Experience from previous cases (5, 28, 31, 44) |
| Pre-existing influences priming expectations of success (22) |
| Lack of experience (29) |
| Inexperience and uncertainty (30) |
|  | | | | | | |
| Emotions and personal values | | Uncertainty | | | | Making sure nothing is missed (21, 45) |
| Prolonged resuscitation when uncertain (21) |
| Requiring verifiable information (8) |
| Unfamiliar situations lead to uncertainty and prolonged decision making (8) |
| Experience and uncertainty (23, 30) |
| Personal beneficence in situations of clinical uncertainty (27) |
| Initiate CPR per default (28) |
|  | | | |  |
| Personal values | | | | Individual and interpersonal factors influence application of formal guidelines (22) |
| Personal and emotional values (8) |
| Responsibility (28) |
| HCP’s religion (31, 33, 38) |
| Heroic value (30) |
|  | | | |  |
| Fear of consequences | | | | Fear of legal issues or criticism (22, 28, 31, 38, 43) |
| Fear of working outside practice guidelines (27) |
| Official complaint from relatives (26) |
|  | | | | | | |
| Team interactions | | Team interaction | | | | Team agreement (5, 31, 22, 25) |
| Team members’ emotions (5) |
| Getting advice from others (21) |
| Consulting with a superior (22, 26, 29, 31) |
| Crew composition (22) |
| **Being influenced by external conditions** | | | | | | |
|  | **Subtheme** | | | **Codes** | | |
| EMS work environment | EMS system | | | Organizational support (22) | | |
| Reputation of the EMS-system (28, 30) | | |
| System-related pressure to save lives no matter what (29) | | |
| Inappropriate resource utilization (43) | | |
|  | | |  | | |
| Training purposes | | | Training and teaching purposes (28, 30, 41) | | |
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| Provider fatigue | | | Provider fatigue at the end of a shift (22) | | |
|  | | |  | | |
| Crew safety | | | Crew safety (8, 28, 31, 37, 45) | | |
| Experience and feeling threatened (45) | | |
| Risk of work-related injuries (22) | | |
|  | | |  | | |
| Area of service | | | Rural vs urban (35) | | |
|  |  | | |  | | |
| Legislation | Formal guidance | | | Guided by the law (24, 38) | | |
| Legal uncertainty (22, 32, 34, 38) | | |
| Circumstantial factors influence application of formal guidelines (22) | | |
|  | | | | | | |
| The cardiac arrest setting | Location of arrest | | | Location of arrest (36) | | |
|  | | | Perceived prognosis according to cardiac arrest setting (21) | | |
|  | | |  | | |
| The environment | | | Weather conditions (31, 36) | | |
| Environmental conditions (8) | | |
|  | | |  | | |
| Logistics | | | Logistical limitations (8, 31) | | |
| **Navigating conflicts in the area of tension between key factors** | | | | | | |
| **Subtheme** | | | **Sub-subtheme** | | **Codes** | |
| Conflicts with the law and guidelines | | | Legal and guidelines | | Balancing patient’s wishes and legislation (22, 38, 43) | |
| Conflict between law and personal values (24) | |
| Balancing patient’s wishes and guidelines (25) | |
| Grey areas vs. protocol adherence (22) | |
| Moral decisions vs. protocol (37) | |
|  | | | | | | |
| Conflicting values | | | Family wishes | | Family wishes vs patient rights (22, 24, 25) | |
| Family wishes vs. resuscitations providers personal values (28) | |
| Family’s wishes vs patient’s best interest (25) | |
| Family wishes vs. DNR (31, 32) | |
|  | |  | |
| The duty to save lives | | Conflict between own moral beliefs and system expectations (29) | |
| Balancing duty and values (23) | |
|  | |  | |
| Team interaction | | Conflicting personal values (in the resuscitation team) (8, 30) | |
| Conflicting interpersonal factors (22) | |
| Interdisciplinary conflicts in the team (5) | |
|  | |  | |
| Lack of information | | Well-founded decision versus futile care (5) | |
| Incomplete or conflicting information (8) | |

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